

**Functional Monomers****ACRYLATES**

Diethylaminoethyl  
Dimethylaminoethyl  
n-Hexyl  
Isodecyl  
Lauryl  
Methoxyethyl  
Phenoxyethyl  
Tetrahydrofuryl

**OLYCIDYL ETHERS**

Allyl  
Butyl

**QUATERNIZED MONOMERS**

DMS Quaternaries  
MC Quaternaries

**CATIONICS**

**Atlanta and 76 other major markets  
are Ashland territory.**

*It's where Ashland delivers service, support and the best in chemicals and specialties.*

The 77 Ashland Distribution Centers across the continent supply North American industry with thousands of basic and specialty chemicals, including organics, inorganics, solvents and surfactants, representing most major producers. Plus custom blends to meet our customers' needs.

Each Ashland district also concentrates on serving the requirements of its local industries. In Atlanta, this includes supplying chemicals to local paint manufacturers, ink-makers and formulators of janitorial products. In Atlanta and throughout the Southeast, we also

are a major source for laundry and drycleaning products. All available locally, fast, in the quantities you want. Backed by industry specialists who know your business. And by Ashland's exclusive safety information programs, technical service, and a nationwide chemical waste service that's unique.

Ashland is America's number-one chemical distributor. Our focus is on your needs, and with our 77 locations, you're bound to be in Ashland territory.

Check the Yellow Pages for Ashland's nearest Distribution Center, or write: Ashland Chemical Company, Industrial Chemicals & Solvents Division, P.O. Box 2219, Columbus, OH 43216.

**Ashland**  
**Ashland Chemical Company**  
DIVISION OF ASHLAND OIL, INC.

ASHLAND product number 14044-418-7010

## Methanol Excess is a Price Problem

Methanol supplies continue to far outstrip demand in the US, despite a huge gain in consumption for use in blending methyl tert. butyl ether (MTBE). The result has been a continued deterioration in methanol pricing, and a large buildup in inventories, particularly imported material.

Total domestic demand for methanol this year is estimated to reach 1.4 billion gallons, according to several sources. This marks an increase of over 100 million gallons compared to 1985. However, the combination of US production plus imports may come in at over 1.5 billion gallons for 1986, representing a 100 million gallon surge in inventories.

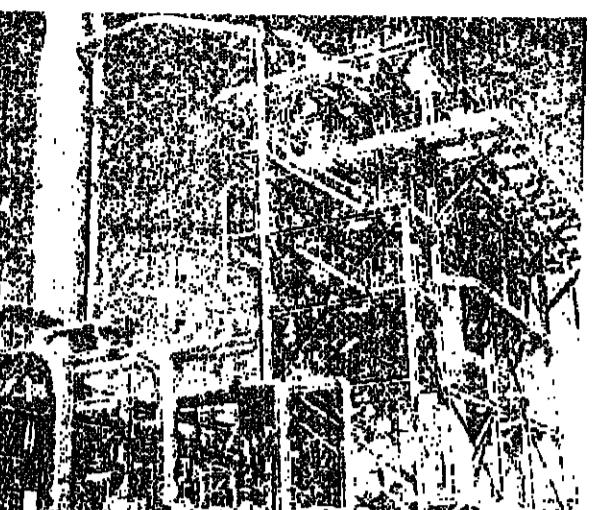
This oversupply, coupled with the sharp decline in crude oil and petrochemical prices this year, has led to a long, steep decline in domestic methanol prices. Starting at close to 40 cents per gallon in January, the

price for methanol sold in barges on the Gulf Coast has now slid to about 26 cents per gallon, down a penny or two from last month. One seller ruefully called methanol, "the sloppiest commodity there is."

US methanol producers have carefully restructured their businesses in the past several years, closing several hundred million gallons of excess capacity. However, falling natural gas prices on the US Gulf Coast made it apparent that US-produced methanol in the past year has become as cost competitive with methanol produced anywhere in the world. Conse-

Continued on Page 17

**METHANOL UNIT:** Falling gas prices induced US producers to increase output, but imports failed to back off and inventories may have risen by as much as 100 million gallons.



VOLUME 230  
Number 19

# Chemical Marketing Reporter

NOVEMBER 10, 1986

## Hoechst Launches Offer For Celanese

Hoechst AG of West Germany and Celanese Corporation last week cemented their long-standing relationship by signing a merger agreement, under which the American firm will be acquired by Hoechst's US subsidiary, American Hoechst Corporation, for \$2.8 billion.

Hoechst has initiated a cash tender offer for all shares of Celanese common stock at \$24 per share. Celanese has 11.1 million shares outstanding. In addition, Hoechst is also offering \$172.40 per share for all outstanding shares of Celanese convertible preference stock and \$102 per share for the company's 7 percent preferred stock.

Following the merger announcement last Monday (November 3), Celanese stock shot up \$24 per share on the New York Stock Exchange, closing a couple of dollars below the offering price.

Wall Street analysts took a favorable view of the proposed merger, seeing synergism in the firms' respective polyester fiber activities. The merger would make Hoechst the largest US producer of staple and the second largest producer of filament fiber, behind E.I. du Pont de Nemours & Co.

Although Celanese and American Hoechst currently compete in the US polyester fiber market, they do not foresee any antitrust concerns getting in the way of the combination.

He says the panel is particularly concerned about the lack of review for regulator genes that control biological functions, and "opportunistic pathogens."

The new rules say removing regulator genes from one organism and splicing them into another is not risky. But the study cites testimony from environmental scientists and biologists who said shifting regulator genes from one organism to another could produce major changes that are potentially dangerous in certain environments.

Opportunistic pathogens are normally harmless organisms that may pose danger to people, plants and animals that have low resistance. The report said such pathogens should be reviewed because genetically modified versions could become pathogenic under certain environmental conditions.

Analysts speculate that the timing of the deal was also influenced by such factors as the fall in the value of the dollar, which

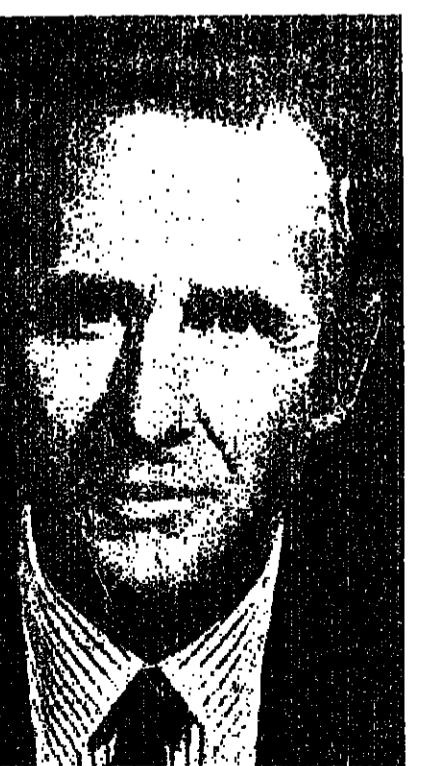
makes American firms a cheaper buy, and changes in the tax code, scheduled to take effect at the beginning of next year.

Mr. Macomber, a management consultant before taking the helm at Celanese, is highly regarded on Wall Street for his restructuring job at the company. Largely defying conventional wisdom in the chemical industry, Mr. Macomber stuck to the company's basic products and initiated a drastic cost-cutting program, making the company a veritable cash machine.

"Macomber has done a remarkable job" at Celanese, says Jay Meltzer, chemical analyst at Goldman Sachs & Co., reflecting a view shared by other industry analysts.

Celanese will continue to operate as a separate entity with essentially the same management and structure intact, according to

Continued on Page 24



John D. Macomber

## US-Canada Trade Talks Could Benefit Chemical Industry

The US and Canada are involved in the most important trade negotiations the neighboring countries have ever had, says US Trade Representative Clayton Yeutter. Mr. Yeutter told a gathering of American and Canadian business leaders at a symposium on trade relations he hopes the negotiations do not become bogged down with "anti-dumping and unfair trade practices provisions." He said Canadian industry and government seem more resistant to an agreement than their US counterparts, even though Canada would gain more from a relaxation of trade barriers.

"Although we will benefit from this negotiation, Canada will benefit even more," said Mr. Yeutter. "Generally, the smaller partner...has the greatest gains."

As an example, Mr. Yeutter cited a bilateral agreement with Israel which relaxed tariffs on Israeli exports of brominated chemicals, among other manufactured goods. "There's no question the greater benefits of that one have gone to Israel," he said.

As a result of that pact, Mr. Yeutter said Israeli exports to the US now exceed that country's imports of US-produced goods and services. "I see no reason why essentially the same scenario wouldn't apply to Canada," the trade official remarked.

The US chemical industry would support a free trade agreement with Canada if certain conditions are met, says Myron T. Foveaux, trade and economic policy advisor for Chemical Manufacturers Association.

Such an agreement, he says, must provide for balanced benefits in chemical concessions.

Continued on Page 18

## Himont Resins On Stream in Gulf

Himont USA Inc., Wilmington, Del., has just brought on stream two new grassroots polypropylene resin "Spheripol" process plants which have been under construction at its Bayport, Tex., and Lake Charles, La., sites and has restarted a line previously placed on standby.

The new bulk technology plant at Lake Charles will manufacture homopolymer, random copolymer and impact copolymer, and the Bayport plant will manufacture homopolymer for the present, the company says.

Himont has now completed its initial investment in new plants by completely duplicating its polypropylene resin capacity with four new-technology "Spheripol" process plants in the past three years. Himont has reaffirmed its commitment to the US domestic market by continuing to run some lines initially planned as standby capacity and this quarter restarting the line previously placed on standby.

## DSM Caprolactam Passes Milestone

DSM's chemical group has produced its 3 millionth ton of caprolactam used as feedstock for nylon yarns and fibers and technical nylon application at its Geleen location, Holland. Caprolactam production on this site was started in 1961.

In addition to the Geleen facilities — where the caprolactam activities come under the fiber feedstocks business unit (Chemical Products Division) — DSM has a caprolactam production unit at Augusta, Georgia, USA (operating company Nipro Inc.).

With a total annual production capacity of 400,000 tons, DSM is in a position to cover about 15 percent of worldwide demand. DSM's caprolactam production is largely based on its own process know-how. Stanicarbon BV, a subsidiary of the DSM-group, is responsible for worldwide commercialization of this know-how. More than one third of the world's caprolactam production capacity is now based on DSM process know-how.

DSM will invest some \$65 million in the caprolactam plants at Geleen. These investments, to be effected between now and 1990, will be aimed notably at introduction of new technologies and energy saving.

## Toxic Waste Pact Inked by US, Canada

The Reagan Administration and Environment Canada have signed a bilateral agreement on the transboundary movement between the US and Canada for hazardous wastes for disposal or recycling.

Prior notification of proposed exports will include the identity of the transporter, the method of transportation, the amount and types of containers to be used, the point of entry, and the manner in which the wastes will be treated, stored or disposed of in the importing country.

In addition, the two governments say they have developed a work plan for cleaning up toxic contamination of the Niagara River.

The plan is the working document to be used in the joint effort to reduce the amount of toxic chemicals entering the river and specifies the activities and timetable to be followed to reach an acceptable level of water quality for the river.

## Sunflowerseeds Get Boost from USDA

Department of Agriculture says it plans to launch a \$3-million program to expand exports of US sunflowerseed oil and other sunflowerseed products to Japan, Mexico, Venezuela, and Portugal.

Funds will be used to promote oil identified as 100 percent sunflower oil and also to provide technical assistance to processors to insure that a quality product is produced, says USDA.

"We want to increase sunflower oil consumption in these four countries and thereby increase demand for US sunflowerseed products," says USDA undersecretary Daniel G. Amstutz.

Promotional activities will be carried out through a cooperative agreement between USDA's foreign agricultural service and the National Sunflower Association, a commodity organization representing the sunflower-seed industry.

The Targeted Export Assistance program will be administered by USDA in accordance with the Food Security Act of 1985.



SOLVENT RECLAMATION PLANT: A shortage of such facilities forced EPA to exempt some chemicals from immediate ban.

## Solvent Disposal Limited by US Agency

Environmental Protection Agency issued new rules Friday prohibiting the land disposal of untreated spent solvents and dioxin-containing hazardous wastes. But because there is a shortage of alternative treatment capacity, the agency exempted dioxins and certain solvent mixtures for two years.

Under the regulations, which took effect November 8, wastes containing certain spent solvents and dioxins must be treated to reduce their toxicity so that only the less toxic residues are disposed of on land.

EPA says the most effective treatment available today for concentrated solvent and dioxin wastes is high-temperature incineration, which destroys the toxic waste components.

But dioxins get an immediate exemption from the ban for two years as do most solvents. Only concentrated solvents were affected Saturday, unless generated at a rate less than 220 pounds per month.

Water solutions and sludges containing less than 1 percent solvents, as well as concentrated waste from establishments meet

Continued on Page 53

## Grace Specialties Expand at Two Sites

W.R. Grace & Co. today announced the completion of a \$10 million general expansion at the headquarters of its Dearborn Division, at Lake Zurich, Ill., and at the division's Mississauga, Ontario, Canada facility.

The Lake Zurich expansion includes the renovation and expansion of research and technical service facilities. The expansion modernizes the present facility, providing new capabilities to meet expected growth in the existing internal water treatment chemical market and in emerging wastewater treatment chemical businesses.

Expansion of the Mississauga facility includes warehouse and production facilities, a two-story office building, laboratory and pilot plant expansion, purchase of additional production, office and laboratory equipment, and other improvements.

## MTBE Plant Slated For EMP of Spain

UOP Inc., a unit of Allied-Signal Inc., has granted a license to EMP, Spain, for the construction of a unit to produce about 51,000 metric tons per year of methyl tert butyl ether at EMP's facilities in Tarragona, Spain.

UOP offers for license the MTBE process technology developed by Hüels AG in Marl, west Germany. The Tarragona facility is the fourteenth unit worldwide designed to employ the Hüels MTBE process.

## NL Says Early Split Won't Be Possible

NL Industries announced today that its board of directors has decided that it is not feasible to implement a proposal that NL had been exploring to separate its petroleum services operations and its chemical operations on an expedited basis. The company will instead proceed with its original plan to separate the businesses by redeeming the NL securities C preferred stock for shares of NL Chemicals common stock.

# Chemical Marketing Reporter

Volume 230 November 10, 1988  
Founded October 18, 1871, by William O. Allen  
Directed 1890-1942 by Harry J. Schell  
Schnell Publishing Company, Inc.  
100 Church Street, New York, NY 10007-3849  
(212) 727-9820, Telex Number: 22613 CMR/NY  
Copyright 1988 by Schnell Publishing Company, Inc.

ABP ABC P/N EW/NW  
EDITOR-IN-CHIEF Harry Van  
MANAGING EDITOR Curtis A. Daynes  
ASSISTANT MANAGING EDITOR William Goodman  
NEWS EDITOR Owen Keene  
WASHINGTON EDITOR Glenn Hess, 1057C National Press Building, Washington, D.C. 20045  
SENIOR EDITOR James V. Gibbons  
STAFF EDITORS Ronald Begley, Nicholas Boyle, Stephen Kearney, Philip Mann, Michael McCoy, Alan Sharkey  
CONTRIBUTING EDITOR Sean Mamo  
BUSINESS STAFF VICE-PRESIDENT OF MARKETING John A. Kuehn  
DIRECTOR OF ADVERTISING SALES J. Ronald Dickey  
ASSISTANT ADVERTISING SALES Don L. Richards  
NEW YORK (212) 732-9820 - Amanda H. Box-Kenneth M. Carroll; Robert W. Wakeland, and Wilson S. Winney  
CHICAGO (312) 577-9880 - Charles H. Oestman, James C. Oestmann, Arlington Publishers Representatives, Inc., P.O. Box 1585, Adams Hotel  
HOTSPUR (212) 577-9820 - Wilson S. Winney  
SACRAMENTO (212) 577-9820 - Wilson S. Winney  
LOS ANGELES (213) 460-9885 - Richard V. Walker, R.W. Walker Company, 2716 West Park Boulevard, Suite 1010, Santa Monica, Calif. 90405  
SAN FRANCISCO (415) 783-9885 - Richard V. Walker, R.W. Walker Company, 2716 West Park Boulevard, Suite 1010, Santa Monica, Calif. 90405  
EUROPE (31) 4609-9885 - Robert Broekman, European Publishers Representatives, Inc., 4 rue Robert de Flers, 75016 Paris, France  
JAPAN (03) 583-0001, Telex: 75368 AMERICA  
N.Y. Allison Lutz, China Consultants International (H.K.), Ltd., Suite 905, Guaridan House, 32, Ci Kuan Road, Happy Valley, Hong Kong  
CINR AD PRODUCTION - Hal-yan Brennen, Paul Oswald  
OPD CHEMICAL BUYERS DIRECTORY - Gary Cardoso, Veronica Gilotti  
PUBLISHER Arthur R. Kavaler  
CHEMICAL MARKETING REPORTER No. 19, November 10, 1988. Published monthly by Schnell Publishing Company, Inc., 100 Church Street, New York, NY 10007-3849. Postage paid at New York, NY, and at additional mailing offices. Second class postage paid at Stamford, Conn. Postmaster: Please address all correspondence to: Postmaster, 100 Church Street, New York, NY 10007-3849. Send Form 3529 to Fulfillment Manager, Chemical Marketing Reporter, 100 Church Street, New York, NY 10007-3849.

PHOTOGRAPH: Right, Alan E. Johnson, chairman of the board, and President Arthur R. Kavaler, chairman of the board, of Schnell Publishing Company, Inc. Below left, President, Eva S. Aufderheide, and President Gordon J. Kavaler, chairman of the board, of Schnell Publishing Company, Inc. Below right, Treasurer, Mary Sava.

PHOTOGRAPH: Right, Alan E. Johnson, chairman of the board, and President Arthur R. Kavaler, chairman of the board, of Schnell Publishing Company, Inc. Below left, President, Eva S. Aufderheide, and President Gordon J. Kavaler, chairman of the board, of Schnell Publishing Company, Inc. Below right, Treasurer, Mary Sava.

PHOTOGRAPH: Right, Alan E. Johnson, chairman of the board, and President Arthur R. Kavaler, chairman of the board, of Schnell Publishing Company, Inc. Below left, President, Eva S. Aufderheide, and President Gordon J. Kavaler, chairman of the board, of Schnell Publishing Company, Inc. Below right, Treasurer, Mary Sava.

PHOTOGRAPH: Right, Alan E. Johnson, chairman of the board, and President Arthur R. Kavaler, chairman of the board, of Schnell Publishing Company, Inc. Below left, President, Eva S. Aufderheide, and President Gordon J. Kavaler, chairman of the board, of Schnell Publishing Company, Inc. Below right, Treasurer, Mary Sava.

PHOTOGRAPH: Right, Alan E. Johnson, chairman of the board, and President Arthur R. Kavaler, chairman of the board, of Schnell Publishing Company, Inc. Below left, President, Eva S. Aufderheide, and President Gordon J. Kavaler, chairman of the board, of Schnell Publishing Company, Inc. Below right, Treasurer, Mary Sava.

PHOTOGRAPH: Right, Alan E. Johnson, chairman of the board, and President Arthur R. Kavaler, chairman of the board, of Schnell Publishing Company, Inc. Below left, President, Eva S. Aufderheide, and President Gordon J. Kavaler, chairman of the board, of Schnell Publishing Company, Inc. Below right, Treasurer, Mary Sava.

PHOTOGRAPH: Right, Alan E. Johnson, chairman of the board, and President Arthur R. Kavaler, chairman of the board, of Schnell Publishing Company, Inc. Below left, President, Eva S. Aufderheide, and President Gordon J. Kavaler, chairman of the board, of Schnell Publishing Company, Inc. Below right, Treasurer, Mary Sava.

PHOTOGRAPH: Right, Alan E. Johnson, chairman of the board, and President Arthur R. Kavaler, chairman of the board, of Schnell Publishing Company, Inc. Below left, President, Eva S. Aufderheide, and President Gordon J. Kavaler, chairman of the board, of Schnell Publishing Company, Inc. Below right, Treasurer, Mary Sava.

PHOTOGRAPH: Right, Alan E. Johnson, chairman of the board, and President Arthur R. Kavaler, chairman of the board, of Schnell Publishing Company, Inc. Below left, President, Eva S. Aufderheide, and President Gordon J. Kavaler, chairman of the board, of Schnell Publishing Company, Inc. Below right, Treasurer, Mary Sava.

PHOTOGRAPH: Right, Alan E. Johnson, chairman of the board, and President Arthur R. Kavaler, chairman of the board, of Schnell Publishing Company, Inc. Below left, President, Eva S. Aufderheide, and President Gordon J. Kavaler, chairman of the board, of Schnell Publishing Company, Inc. Below right, Treasurer, Mary Sava.

PHOTOGRAPH: Right, Alan E. Johnson, chairman of the board, and President Arthur R. Kavaler, chairman of the board, of Schnell Publishing Company, Inc. Below left, President, Eva S. Aufderheide, and President Gordon J. Kavaler, chairman of the board, of Schnell Publishing Company, Inc. Below right, Treasurer, Mary Sava.

PHOTOGRAPH: Right, Alan E. Johnson, chairman of the board, and President Arthur R. Kavaler, chairman of the board, of Schnell Publishing Company, Inc. Below left, President, Eva S. Aufderheide, and President Gordon J. Kavaler, chairman of the board, of Schnell Publishing Company, Inc. Below right, Treasurer, Mary Sava.

PHOTOGRAPH: Right, Alan E. Johnson, chairman of the board, and President Arthur R. Kavaler, chairman of the board, of Schnell Publishing Company, Inc. Below left, President, Eva S. Aufderheide, and President Gordon J. Kavaler, chairman of the board, of Schnell Publishing Company, Inc. Below right, Treasurer, Mary Sava.

PHOTOGRAPH: Right, Alan E. Johnson, chairman of the board, and President Arthur R. Kavaler, chairman of the board, of Schnell Publishing Company, Inc. Below left, President, Eva S. Aufderheide, and President Gordon J. Kavaler, chairman of the board, of Schnell Publishing Company, Inc. Below right, Treasurer, Mary Sava.

PHOTOGRAPH: Right, Alan E. Johnson, chairman of the board, and President Arthur R. Kavaler, chairman of the board, of Schnell Publishing Company, Inc. Below left, President, Eva S. Aufderheide, and President Gordon J. Kavaler, chairman of the board, of Schnell Publishing Company, Inc. Below right, Treasurer, Mary Sava.

PHOTOGRAPH: Right, Alan E. Johnson, chairman of the board, and President Arthur R. Kavaler, chairman of the board, of Schnell Publishing Company, Inc. Below left, President, Eva S. Aufderheide, and President Gordon J. Kavaler, chairman of the board, of Schnell Publishing Company, Inc. Below right, Treasurer, Mary Sava.

PHOTOGRAPH: Right, Alan E. Johnson, chairman of the board, and President Arthur R. Kavaler, chairman of the board, of Schnell Publishing Company, Inc. Below left, President, Eva S. Aufderheide, and President Gordon J. Kavaler, chairman of the board, of Schnell Publishing Company, Inc. Below right, Treasurer, Mary Sava.

PHOTOGRAPH: Right, Alan E. Johnson, chairman of the board, and President Arthur R. Kavaler, chairman of the board, of Schnell Publishing Company, Inc. Below left, President, Eva S. Aufderheide, and President Gordon J. Kavaler, chairman of the board, of Schnell Publishing Company, Inc. Below right, Treasurer, Mary Sava.

PHOTOGRAPH: Right, Alan E. Johnson, chairman of the board, and President Arthur R. Kavaler, chairman of the board, of Schnell Publishing Company, Inc. Below left, President, Eva S. Aufderheide, and President Gordon J. Kavaler, chairman of the board, of Schnell Publishing Company, Inc. Below right, Treasurer, Mary Sava.

PHOTOGRAPH: Right, Alan E. Johnson, chairman of the board, and President Arthur R. Kavaler, chairman of the board, of Schnell Publishing Company, Inc. Below left, President, Eva S. Aufderheide, and President Gordon J. Kavaler, chairman of the board, of Schnell Publishing Company, Inc. Below right, Treasurer, Mary Sava.

PHOTOGRAPH: Right, Alan E. Johnson, chairman of the board, and President Arthur R. Kavaler, chairman of the board, of Schnell Publishing Company, Inc. Below left, President, Eva S. Aufderheide, and President Gordon J. Kavaler, chairman of the board, of Schnell Publishing Company, Inc. Below right, Treasurer, Mary Sava.

PHOTOGRAPH: Right, Alan E. Johnson, chairman of the board, and President Arthur R. Kavaler, chairman of the board, of Schnell Publishing Company, Inc. Below left, President, Eva S. Aufderheide, and President Gordon J. Kavaler, chairman of the board, of Schnell Publishing Company, Inc. Below right, Treasurer, Mary Sava.

PHOTOGRAPH: Right, Alan E. Johnson, chairman of the board, and President Arthur R. Kavaler, chairman of the board, of Schnell Publishing Company, Inc. Below left, President, Eva S. Aufderheide, and President Gordon J. Kavaler, chairman of the board, of Schnell Publishing Company, Inc. Below right, Treasurer, Mary Sava.

PHOTOGRAPH: Right, Alan E. Johnson, chairman of the board, and President Arthur R. Kavaler, chairman of the board, of Schnell Publishing Company, Inc. Below left, President, Eva S. Aufderheide, and President Gordon J. Kavaler, chairman of the board, of Schnell Publishing Company, Inc. Below right, Treasurer, Mary Sava.

PHOTOGRAPH: Right, Alan E. Johnson, chairman of the board, and President Arthur R. Kavaler, chairman of the board, of Schnell Publishing Company, Inc. Below left, President, Eva S. Aufderheide, and President Gordon J. Kavaler, chairman of the board, of Schnell Publishing Company, Inc. Below right, Treasurer, Mary Sava.

PHOTOGRAPH: Right, Alan E. Johnson, chairman of the board, and President Arthur R. Kavaler, chairman of the board, of Schnell Publishing Company, Inc. Below left, President, Eva S. Aufderheide, and President Gordon J. Kavaler, chairman of the board, of Schnell Publishing Company, Inc. Below right, Treasurer, Mary Sava.

PHOTOGRAPH: Right, Alan E. Johnson, chairman of the board, and President Arthur R. Kavaler, chairman of the board, of Schnell Publishing Company, Inc. Below left, President, Eva S. Aufderheide, and President Gordon J. Kavaler, chairman of the board, of Schnell Publishing Company, Inc. Below right, Treasurer, Mary Sava.

PHOTOGRAPH: Right, Alan E. Johnson, chairman of the board, and President Arthur R. Kavaler, chairman of the board, of Schnell Publishing Company, Inc. Below left, President, Eva S. Aufderheide, and President Gordon J. Kavaler, chairman of the board, of Schnell Publishing Company, Inc. Below right, Treasurer, Mary Sava.

PHOTOGRAPH: Right, Alan E. Johnson, chairman of the board, and President Arthur R. Kavaler, chairman of the board, of Schnell Publishing Company, Inc. Below left, President, Eva S. Aufderheide, and President Gordon J. Kavaler, chairman of the board, of Schnell Publishing Company, Inc. Below right, Treasurer, Mary Sava.

PHOTOGRAPH: Right, Alan E. Johnson, chairman of the board, and President Arthur R. Kavaler, chairman of the board, of Schnell Publishing Company, Inc. Below left, President, Eva S. Aufderheide, and President Gordon J. Kavaler, chairman of the board, of Schnell Publishing Company, Inc. Below right, Treasurer, Mary Sava.

PHOTOGRAPH: Right, Alan E. Johnson, chairman of the board, and President Arthur R. Kavaler, chairman of the board, of Schnell Publishing Company, Inc. Below left, President, Eva S. Aufderheide, and President Gordon J. Kavaler, chairman of the board, of Schnell Publishing Company, Inc. Below right, Treasurer, Mary Sava.</p



## ICI Petrochemicals

A strong, reliable producer of quality products from Bayport, Texas:

- Ethylene oxide and glycols
- Methyl, ethyl, and butyl glycol ethers
- Butyl and ethyl glycol ether acetates
- Ethanolamines, brake fluids

...and now polyethylene glycols!

1 800 441-7757, ext. 8790

**ICI Americas Inc.**



### Water Bill Veto By Reagan Laid to Costs

President Reagan, heeding the advice of the White House budget office, Thursday vetoed widely supported legislation to revise and reauthorize the Clean Water Act, saying the proposed \$18 billion extension is too expensive.

In a statement explaining the reasons for his pocket veto, the President said his administration remains committed to the objectives of the 1972 clean water law and will work closely with the next Congress to pass acceptable legislation.

"Unfortunately, this bill so far exceeds acceptable levels of intended budgetary commitments that I must withhold my approval," President Reagan remarked, noting the measure would triple the amount he had requested for the program.

The legislation vetoed last week was passed unanimously by the outgoing Congress and was strongly supported by environmentalists. Chemical Manufacturers Association said the final product was an adequate compromise and urged the President to sign the bill.

Sen. Daniel Moynihan (D-NY), said a pres-

Continued on Page 52

### Waste Rules To Be Widened By US Agency

Environmental Protection Agency is proposing to regulate "miscellaneous" hazardous waste units not now covered under existing Federal hazardous waste regulations under the Resource Conservation & Recovery Act (RCRA).

The proposal would set new, general permitting standards for many types of units in need of hazardous waste controls which do not fall under existing facility definitions. EPA says the proposal is designed to close the gaps in the current regulatory program.

Under the proposal, the agency would apply a combination of performance standards that would address groundwater and subsurface migration, surface water and air on a case-by-case basis as requests for permits are received.

EPA says this approach would allow the agency to address a full range of environmental issues raised by a particular waste management situation without waiting to establish specific standards for each type of

### Canadian Drug Bill

The Canadian Government last week introduced legislation in Parliament to extend patent protection for brand name drugs. Draft legislation circulated before Parliament's Summer recess provided up to 10 years of market exclusivity, but the bill introduced last week provides only seven years protection from generic copies.

## Du Pont Grooms Resin For Big Role in Detroit; Breakthrough Claimed

The rapid penetration of automotive markets by plastics which the chemical industry has always hoped for and often predicted could soon become a reality through a new breakthrough by E. I. du Pont de Nemours & Co., that reportedly improves all of the relevant properties of its polyarylate resins and initially lowers the cost by 20 percent, with further cost reductions promised.

The research breakthrough was announced by Du Pont in New York on Election Day last week. While Nicholas Pappas, Du Pont's group vice-president for polymer products, and his associates, laid great stress on the potential in autos, because of the large market potential there, they also said that rapid acceptance was expected in electrical and electronics markets and consumer and recreation outlets.

Dr. Pappas said the new Du Pont process produces a plastic that is super tough, for the impact resistance needed in automobiles, and has high heat resistance.

The new engineering resins, introduced under the trademark "Arylon," also have excel-

lent weathering characteristics, and are easier to process than are other high-performance plastics, including the existing line of polycarbonate resins, Dr. Pappas said.

Lawrence H. Gillespie, Jr., director of the department's plastic engineering operations, predicted that as a result of the breakthrough, polycarbonate's sales volume could become as large as that of nylon resin, currently the largest of the engineering plastics, with an estimated 35 percent of a world market of 4 billion pounds a year. Engineering resins are growing at about 8 percent yearly, worldwide, Mr. Gillespie said.

For automotive uses, the new polycarbonate will be sold under the existing trademark "Bexley." A variety of "Bexley" alloys are now under development for injection molding, blow molding and thermoforming, which will lead to lower production costs for auto makers, Mr. Gillespie said.

"Bexley" M will be priced competitively with other plastic systems competing in the body part market, but will require only about half the cycling time as thermoset resins, he added.

With the diversity of markets and uses

Continued on Page 15

### Merck Seeks Approval

Merck & Co., Inc. plans to file a New Drug Application requesting Food & Drug Administration approval to market lovastatin, a Merck drug discovery for lowering high levels of cholesterol.

"Lovastatin is a promising cholesterol-lowering agent discovered by Merck scientists. In long-term clinical trials, lovastatin continues to show a high degree of safety and more effectiveness than any known drug in reducing the elevated levels of low-density lipoproteins that are correlated with coronary heart disease," said Dr. P. Roy Vagelos, chairman and chief executive officer of the health products company.

Merck announced last week that it had just received FDA approvals to market

"Noroxin," an oral antibacterial for urinary tract infections, and "Vaseretic," a cardiovascular drug that combines the company's antihypertensive "Vasotec" with Merck's long-established diuretic "HydroDiluril."

The company will simultaneously introduce in the United States next week both "Noroxin" and "Pepcid," a recently approved H-2 receptor antagonist for control of duodenal ulcers.

"Vaseretic" will be introduced in the United States in the first quarter of 1987, followed by introductions abroad later that year. The company expects that physicians will often choose this product for patients whose high blood pressure is difficult to control.

### Warner-Lambert Reviews Drug Development Efforts

Warner-Lambert Company, in scientific presentations to financial analysts last week, reviewed its progress in developing pharmaceutical compounds in several therapeutic areas, including antibiotics, cardiovascular, anticancer, central nervous system, and allergy and asthma.

The company said its broad-spectrum antibiotic amoxicillin (enoxacin) has been deemed approvable for marketing in West Germany, and that marketing would begin early next year. A new drug application (NDA) was submitted to the Food & Drug Administration (FDA) in October to market

enoxacillin in the US. Enoxacillin also has been deemed approvable for marketing in New Zealand.

Enoxacin is a quinolone antibiotic, one of a promising new class of drugs. In worldwide clinical studies involving 6,500 patients, it has been shown to offer effective bacterial action against a variety of conditions, including infections of the urinary tract, skin and soft tissues, lower and upper respiratory tracts, and genital tract infections.

Enoxacin was licensed by Warner-Lambert from Dainippon of Japan. Several new quinolones are being researched at the Warner-Lambert/Parke-Davis Research Center in Ann Arbor.

In the cardiovascular category, the company noted that its beta-blocker bevantolol has been approved in Denmark for the treatment of hypertension and angina pectoris. An

NDA for hypertension is currently under active review by the FDA.

The company also said that it has developed a combination product of bevantolol with the diuretic hydrochlorothiazide and filed an NDA for the product in 1985.

The fastest-growing segment of the beta-blocker market in many parts of the world is in drugs that are in combination with diuretics. Quinapril, an ACE inhibitor cardiovascular drug, is the subject of a worldwide clinical development program for the treatment of hypertension and angina pectoris, the company said. A combination product including hydrochlorothiazide is also in development.

Also in the cardiovascular area, the company said that quinapril and a specific cardiotonic agent, imazodan, are being tested for efficacy in improving cardiac performance in the case of heart failure. Imazodan is a chemically novel, orally effective agent that is able to increase the force of myocardial contraction, with the added benefit of peripheral vasodilation.

In comparison with other currently available drugs for congestive heart failure, imazodan may possess a greater degree of cardiac safety than digitalis, and is orally effective, in contrast to dobutamine and dopamine, which must be given intravenously, the company says.

In the antiarrhythmic segment of the cardiovascular field, the company discussed plimorone, which is currently being developed. The analysis also notes the commercial and industrial customers are benefiting from rate restructuring at the state level.

The analysis states that such restructuring to retain large volume gas users is protecting the residential customer from paying a high proportion of the operating costs of the system.

Continued on Page 16

## CFC's Cap Now Planned By Officials

Following an earlier policy shift by the US chemical industry, the Reagan Administration plans to propose a global cap and eventual phase-out of emissions of man-made chemicals linked to the world-wide phenomenon of ozone depletion.

An Environmental Protection Agency official says the proposal to freeze production of chlorofluorocarbon and halon gases at or close to current levels will be submitted to other nations to elicit their views before the US makes a formal proposal at a meeting sponsored by the United Nations Environment Program in Geneva, Switzerland, during the first week of December.

A State Department cable to US embassies made available by EPA said that "based on current scientific understanding, considerable risks may exist to humans and the environment from continued or expanded global emissions" of these chemicals.

The cable said the US position also would be to provide adequate time for companies to shift away from the chemicals "to avoid social and economic disruption."

A State Department spokesman says the US will seek incentives designed to narrow CFC emissions, but has not yet determined how much of a cutback is needed because of scientific uncertainty.

CFC production dropped in the late 1970's, but has now started a comeback. The US produces about a third of the gases manufactured in the free world.

CFC's are used primarily as refrigerants for air conditioning systems and refrigerators and in the manufacture of plastic foam used in insulation and packing purposes. In addition, the chemical is still used as spray can propellants in many countries. Halons, Continued on Page 53

## Retail Gas Price Seen Dropping By 6 Percent

Retail natural gas prices for the 1986-87 heating season are expected to be 6 percent below the same period last year, the American Gas Association said last week.

An AGA study, "Estimated Change in Natural Gas Prices During the 1986-87 Winter Season," analyzed the purchased gas adjustment filings of 25 interstate natural gas pipelines accounting for 95 percent of interstate gas purchases. The analysis showed that the gas price decline which started in 1985 is continuing despite an inflation rate 2.4 percent higher this heating season than last.

The average national retail natural gas price is expected to be \$5.28 per MM Btu's this winter, compared to \$5.80 per MM Btu's in the winter of '85-'86, the AGA says.

The analysis shows a complete pass through to the natural gas distributor of the 32 cents per MM Btu's price drop this winter by gas pipelines. This 32 cent decline in the city-gate price passed through to residential gas consumers represents a 6 percent decline in their gas price compared to last winter.

The analysis points out that commercial and industrial customers are having a higher percentage price decline than residential consumers because the actual gas commodity cost is a much higher percentage of their rates and thus declines in gas costs have had a larger impact on retail rates for these service sectors.

The analysis also notes the commercial and industrial customers are benefiting from rate restructuring at the state level.

The analysis states that such restructuring to retain large volume gas users is protecting the residential customer from paying a high proportion of the operating costs of the system.

Continued on Page 16

## DIISOBUTYLENE

FROM

## TEXAS PETROCHEMICALS

- ONLY MANUFACTURER OF DIISOBUTYLENE IN THE WESTERN HEMISPHERE.
- CENTRALLY LOCATED IN HOUSTON, TEXAS.
- CAPACITY IN EXCESS OF 50 MILLION POUNDS PER YEAR.
- QUALITY SUPERIOR TO THAT OF TYPICAL DIISOBUTYLENE HISTORICALLY IMPORTED.
- AVAILABLE AT HOUSTON, TEXAS & BAYONNE, NEW JERSEY.

SAMPLES & TECHNICAL INFORMATION AVAILABLE

**713/461-3322**



TEXAS PETROCHEMICALS CORPORATION  
8811 GAYLORD, HOUSTON, TEXAS 77024

PUT OUR NUMBER IN YOUR SOURCE BOOK NOW

## News Capsule

### Lilly Plans Purchase

Lilly Industrial Coatings Inc. has agreed to purchase 49 percent of the outstanding common stock of American Lacquer and Solvents Company from Frank Esposito, owner of the two firms. Lilly will also hold an option to purchase the remaining 51 percent interest in both firms.

### Williams Mulls Restructuring

Williams Companies chairman Joseph H. Williams told security analysts that the company is considering various financial restructuring steps to enhance shareholder value. "It would be premature at this time to outline the specifics," Mr. Williams said, but added that they would likely be implemented before year's end. Some steps have previously been discussed.

### IMC Launches Unit

International Minerals & Chemical Corporation has formed a new scientific business unit, the IMCELL Products Division, to produce and market growth factors and related serum replacement products to the cell culture industry. The new division will seek to position itself as a major supplier to the emerging cell culture industry, where products include pharmaceuticals, diagnostics and vaccines.

### Nat'l Distillers Buys

National Distillers & Chemical Corporation has completed the purchase of Enron Chemical Company, the petrochemicals subsidiary of Enron Corporation. The purchase price was approximately \$570 million in cash and the assumption of approximately \$34 million of industrial revenue bond indebtedness.

### Dow Health Study

As part of its health surveillance program, Dow Chemical Company has completed a general study of its Ludington, Mich., plant employees, which found a "significantly lower than average mortality rates from major causes of death." The observed rate for all major causes of death, including all cancers, was 30 percent below the expected level, based on comparisons with two general population groups, Dow said.

### Uniroyal Sells Subsidiary

Uniroyal Inc. has sold its Uniroyal Plastics Company Inc. subsidiary to Polycast Technology Corporation for approximately \$10 million. Uniroyal Plastics manufactures high-technology rubber and plastic-based products, including coated fabrics, adhesives, sealants, engineered systems, thermoplastics sheet and composites, specialty foams and flexographic printing plates.

### FMC In Accord

FMC Corporation says it has reached agreement with Centocor Inc. to exchange FMC's 50 percent interest in Immunex Associates, a joint venture of the two companies, for 1.35 million shares of Centocor common stock. The agreement is subject to the approval of the boards of directors of both companies. The accord ends a dispute between the firms over the property rights of Immunex, which specializes in research and development of monoclonal antibodies and immunoregulation products.



CPC's J.R. Elezner

## CPC Buys Back Shares Held By Perelman

From the timing of events, at least, it would seem that all CPC International Inc. had to do was to say it would restructure itself and buy back 10 million of its shares, and it was able to thwart a hostile acquisition by a group led by Ronald O. Perelman.

Mr. Perelman, chairman of Revlon Company, who has purchased several companies and sold off their assets at large profits, sold back about 4 million shares of CPC, amounting to 8.3 percent of its outstanding common shares, a day after CPC had announced its plans for restructuring and buying back shares.

When CPC announced its plans, the company noted that an investor group had accumulated more than 5 percent of its shares.

CPC said that its investment banker, Salomon Brothers Incorporated was developing strategies for restructuring the company so as to maximize value to shareholders.

"This new direction is intended to achieve sharper strategic focus on the company's US and grocery products businesses and to lead to significant reductions in overheads and

Continued on Page 22

## Chesebrough Sets \$150 Million In Divestments

As part of its continuing realignment of product lines, Chesebrough-Pond's Inc. is offering to sell selective, non-strategic chemical and related businesses with aggregate annual sales of about \$155 million, according to Ralph E. Ward, chairman and chief executive officer.

The businesses offered for sale comprise Stauffer Seeds, with plants in Lone Tree, Iowa; Hutchinson, Kan.; Danvers, Mass.; Phillips, Neb., and Madison, Wis.; chloralkali plants in St. Gabriel, La., and Henderson, Nev.

Also, formulated food system plants in Rochester, Minn., and Clawson, Mich. Shearson Lehman Brothers, Inc., New York, is acting as financial advisor for these transactions.

In addition, Chesebrough is offering for sale its fabricated plastics business, with a plant in Anderson, S.C. The sale of this unit will be handled directly by Chesebrough's treasurer's office.

No changes in operations or employment

Continued on Page 32

## Union Carbide Attacks Debt Incurred Earlier

Union Carbide Corporation has adopted a plan to redress its balance sheet by retiring or converting much of the huge debt incurred in its successful defense earlier this year against an unsolicited tender offer to acquire the company by GAF Corporation, of Wayne, N.J.

Union Carbide will undertake a major recapitalization plan that will significantly reduce the corporation's debt and interest expense, strengthen its financial condition and increase "its ability to pursue future growth opportunities free of restrictive indenture covenants, without earnings dilution," a company spokesman said.

In the first step, Union Carbide has commenced a tender offer to purchase all of the \$2.5 billion principal amount of securities issued to shareholders pursuant to its January 1988 exchange offer, which was a successful counter-offer to GAF's tender for Union Carbide's common shares. These securities bear an average interest rate of 14.2 percent.

Because of their high interest rates, the securities will be purchased at substantial premiums, which will result in an extraordinary charge to earnings in the current quarter.

First Boston Corporation will act as dealer-manager for the tender offer.

After the tender offer, Union Carbide will repay a substantial portion of the purchase price for the securities with proceeds from the previously announced divestment of the company's agricultural products and electronics component businesses and the sale and leaseback last week of its Danbury, Conn., headquarters, plus the net proceeds of a \$500 million domestic and international public offering of Union Carbide common stock.

Last in the week, Union Carbide announced that the corporation had signed a letter of intent with Related Companies, Incorporated, of New York, for the sale of the Danbury headquarters building and its 650-acre headquarters site, and for the leaseback of the headquarters building. The sale price will be approximately \$345 million.

The transaction is expected to be completed by year-end. A pre-tax gain in excess of \$100 million is expected to be realized over approximately 20 years and is expected to have no material effect on net income in 1988.

In addition, Union Carbide will participate in a limited partnership with Related Companies for the planned future development of

Continued on Page 32

## Petro-Lewis Holders Tender

Freeport-McMoRan Incorporated advanced another step in its effort to gain control of Petro-Lewis Corporation when the bulk of Petro-Lewis's outstanding securities were tendered to FPCO, Inc., under FPCO's tender offer. FPCO was formed under the direction of Freeport-McMoRan.

## Why do we have a plentiful supply of gum arabic at a fair price while the traders don't?

Because we're the world's only basic producers and for the last 25 years we have re-invested our profits in long-term research and development for the good of the industry, and the benefit of our customers.

For example:

The traders have—

1. Created a gum association which meets once a year for mostly social reasons.
2. For the most part never visited a gum producing zone.
3. Published misleading statistics which ignore the realities of gum production in the world's arid zones.
4. Published literature and promotional material which completely ignores the botanical origin, geographical distribution and growing conditions of the acacia crop.
5. Blamed the roller-coaster rides of supply and demand and high prices on Mother Nature instead of using modern science and agribusiness techniques to improve natural conditions and product surety and quality.
6. All used the same gum processing sub-contractors for years.

We have—

1. Implemented and funded taxonomical studies of more than 100 different African acacia species that produce gum in commercial quantities.
2. Created the first biosynergy among various acacia species to increase output and improve performance.
3. Created 5 companies in the producing African countries in partnerships with local brokers to develop and improve crop harvesting and export.
4. Planted 75,000 improved trees in 6 different locations while controlling 3 modern nursing facilities.
5. Organized four international symposia on gum tree development and gum production.
6. Built and continuously developed the largest existing gum processing plant in the world.
7. Developed more than 500 different application formulas based on gum arabic, all pre-tested in a fully equipped food processing pilot plant.
8. Founded, organized and sponsored the first university program for gum biochemistry and gum science (ICOL) offering Ph.D.s in gum chemistry.
9. Created a foundation, AIDGUM, for developing gum production and training gum producers.
10. Granted scholarships to more than 20 students or engineers from producing countries to be trained at ICOL and in various labs in biogeography, plant genetics, silviculture, biological and botanical science.
11. Sponsored research in 5 European universities for gum biochemistry, gum biology, rheology, botany, metabolism, etc.

## Now What Reason Could There Be For Buying Gum Arabic From Anyone Other Than Colloides Naturels?

IN FRANCE:  
IRANEX S.A.  
4, RUE FREDERIC PASSY  
92200 NEUILLY-SUR-SEINE  
TEL: (1) 47 47 18 50 TLX: 620089

IN MEXICO:  
GOMAS NATURALES S.A. DE C.V.  
SAN FRANCISCO 1374-401  
COL. DEL VALLE  
MEXICO D.F. 03100  
TEL: 559 1612 TLX: 1764000

**COLLOIDES NATURELS INC**  
Second Generation Acacia

P.O. Box 561  
Route 202 & Dumont Rd.  
Far Hills, NJ 07931  
Phone: (201) 234-9494 Telex: 833-775

## OILS, FATS & WAXES

### Soybean Oil Market Weakens As Crush Rate Ups Supply

Strong crush rates through the month of October are providing the market with more soybean oil than it can consume. As a result the prices, which had been moving upward for several weeks, have begun to ease down, as consumer demand for the oil is also backing off.

The soybean crush rate rose every week during the month of October, according to industry figures, reaching a high of 22.3 million bushels for the week ending Oct. 29. This compares to the crush rate one year earlier of 18.9 million bushels for the week ending Oct. 30, 1985.

The present crush rate is being fueled by strong meal demand, sources say, both in the US and abroad. Part of the domestic demand seen now represents an effort to catch up to slow production earlier this year. "Crushers took a lot of downtime this summer," says an industry analyst, "and when they wanted to crush, to build up their stocks, the lateness of the crop kept material from being available."

The heavy crush rate is supplying the oil market with more material than it seems to need. Domestically, consumers are said to be well-covered. "The pipelines have been filled," says a source, "and demand is more than satisfied. For oil, the supply is going up as the demand is coming down."

#### SOME REFINERIES SLOWED

He goes on to note that some refineries are slowing down, particularly for salad oil. Some sources see consumer interest as at least fair, but not sufficient to absorb all the oil being produced.

What is hurting US oil producers worse than lagging domestic buying is the lack of European demand. "There is no export business for soy oil from the US," says one dealer. He blames this on European rapeseed and soybean oils, as well as on Malaysian palm oil, all of which are at a discount to US soy oil delivered prices in Europe, he says.

He predicts that some "major oil buying" from a consumer such as India or the Soviet Union would spur the world oil market and provide relief for US soy oil. Although India has recently announced a cutback in the amount of vegetable oil it will import, he says, it is believed India will have a difficult time meeting its demand with domestic oil.

Not all dealers are convinced that soybean oil stocks are building up. "It would not call demand disappointing right now, and we are certainly not drowning in oil," says a dealer. Nevertheless, the crush rate is climbing and, as one dealer says, "We don't see the build-up in time meeting its demand with domestic oil."

Prices will come up, sources say. But, as one dealer says, "Stocks are so ample here that it's hard to justify raising prices." Brazil's short crop situation, their reason for wanting to raise pricing, is being eased by their import of castor beans from China and Paraguay, a source says.

COCONUT OIL — The coconut oil market has been very erratic, with prices rising and falling from day to day. Traders attribute this to the activity of origin sellers, who have been entering the market on an irregular basis to repurchase contracts. Most of the activity has been among dealers, with consumers staying away from these high prices.

COTTONSEED OIL — Following a period of strong buying activity, demand for cottonseed oil has begun to fall off. High prices for coconut and palm oils spurred buying interest in cottonseed oil, particularly for forward positions, according to an industry source. Last week, however, as prices of those oils started to weaken, so did the interest in cottonseed oil.

Nevertheless, upward pressure on the price is expected to remain due to the reduced size of this year's crop. Also, stiff competition from dairy farmers, looking to buy cottonseed as feed for their herds, make it unlikely that crushers will be able to buy very much seed this year, thereby keeping oil stocks low. Aggravating the short supply situation is the fact that oil yields from some of the crop have been low, particularly from seed planted late in the season, in time to be hurt by dry weather.

LINSEED OIL — Producers are expecting a more stable linseed oil market this year due to farmers' reluctance to flood the market with seed. "The farmers put away more flaxseed than we thought they would," says an industry source, who cites dissatisfaction with current price levels as the reason for withholding some of the material. Flax is said to be plentiful, but by introducing it

in the stock figures yet, but we're seeing it on the market."

#### VEGETABLE OILS

CASTOR OIL — The price of this oil is quoted at 31c. to 33c. per pound for raw No. 1 oil from Brazil, in tanks. Trading activity is described as quiet at the moment, with consumers unwilling to meet present prices. "It's a stand-off between buyers and sellers, and it's just a matter of who gives in first," says an industry source.

Adding to consumers' reluctance to do business are the plentiful supplies in the market. Brazil is continuing to indicate that its

#### PRICES TRENDLINES

WEEK ENDING NOV. 7, 1986

#### CHANGES/UP

Coconut oil, NY, 4c. per lb.  
Cottonseed, 41% bulk, Memphis, 55 per ton  
Grease, white, choice, tanks, div., NY, 4c. per lb.  
Grease, yellow maximum 10%, fat tanks, 4c. per lb.  
Soybean, 44% bulk, Decatur, 82 per ton

#### CHANGES/DOWN

Palm oil, NY 4c. per lb.

#### OILS, FATS INDEX

The Oils, Fats & Waxes Index reflects the prices of 11 representative materials in this sector and the quantity of each produced in 1985.

Nov. 7, 1986 .....	82.74
Oct. 31, 1986 .....	81.84
Oct. 10, 1986 .....	76.39
Nov. 8, 1985 .....	90.60

Chemical Prices Start on Page 36

## TWO MORE reasons to use Genuine Recovery™ Drums:



Call 312/767-2990

for brochure, complete specifications and prices. Or write:

**Clearing Container**

Division of **NATICO**, Inc.  
5100 West 67th Street  
Chicago, IL 60638

©CL CLEARING CONTAINER 1985

**AGRO TIMES**  
We Are The Rapeseed People

**EDIBLE  
RAPSEED OIL**  
Available for 1st Time

AGRO INGREDIENTS, INC.

604 E. Algonquin Rd., Des Plaines, IL 60016

Please send FREE sample of \_\_\_\_\_

Please send specs on \_\_\_\_\_

Name \_\_\_\_\_

Firm \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Phone \_\_\_\_\_

Telex 206168 AGRO-ING 312/298-4000

113

**LARD OIL**

For Finest Quality animal oils and specialty chemicals call

**ANAR** 312-953-1660

LARD OILS All grades • TALLOW FATTY ACID • TALLOW

DETERGENTS & CLEANERS • LIQUID & BAR SOAPS • ATO

NEUTRAL SOAPS Tallow & Vegetable • ANKFOOT OIL

OLEO STEARINE • METHYL LARDATE • BUTYL STEARATE

GLYCERINE • OLEIC ACID • AND OTHER FINE PRODUCTS

For compounding and formulating, we

have the quality industrial oils for

exceptional wetting, lubricity, crease

For general lubricants, water soluble

cutting fluids, hi-pressure, boundary

and steam cylinder lubricants, mold

release agents. Call ANAR now.

Send data on LARD OILS

SEND FREE SAMPLE

We are interested in other oils such as \_\_\_\_\_

Name \_\_\_\_\_ Title \_\_\_\_\_

Firm \_\_\_\_\_ Dept. \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

**PROVEN  
QUALITY  
PRODUCTS  
since 1838**

**VEGETABLE OILS  
CRUDE-REFINED-USP/NF**

Almond  
Castor  
Coconut  
Corn  
Cottonseed  
Linseed

Olive  
Palm  
Peanut  
Persic  
Poppyseed  
Rice Bran  
Tung

**LECITHIN • TALL OILS**

We meet your basic needs



**WELCH, HOLME & CLARK CO., INC.**  
1000 South Fourth Street, Harrison, N.J. 07029 • (201) 482-7812 Telex No. 5106014858

At our Pampa, Texas plant, product quality is more than the concern of a single department. It's a deep seated commitment to "do it right the first time." That same commitment is echoed throughout the Celanese Chemical Company.

Our loading and lab people recently initiated the idea of a quality feedback survey. A postage paid reply card with the picture of the analyst or loader is attached to each shipment and to each certificate of analysis. This is done to demonstrate the personal responsibility for quality.

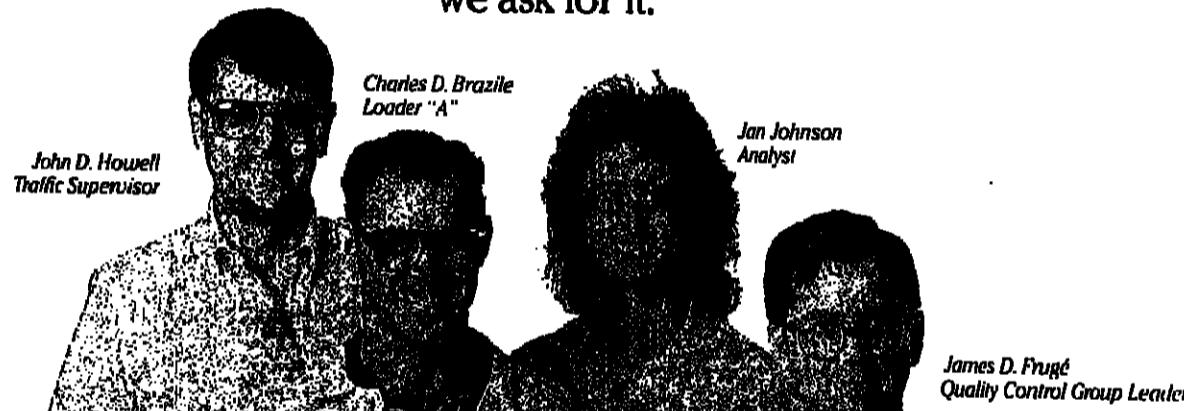
Thus far, the results have been gratifying, with a

very high response rate. All seem to be pleased that Celanese has provided this opportunity for customer feedback.

The feedback process creates two-way communications, which in turn leads to greater customer satisfaction. That's Celanese quality, inside and out. When quality matters, consider Celanese first. With us, it's a matter of personal pride.

Celanese Chemical Company, Inc.  
1250 West Mockingbird Lane, Dallas, Texas 75247.  
1-800-CELANESE

When it comes to  
**CUSTOMER FEEDBACK,**  
we ask for it.



Synthetic Fatty Acids • Polyols • Formaldehyde • Acrylic Acid/Esters • Alcohols



Ethylene Oxide/Bisglycidyl Methane • Acrylic Acid/Esters • Aldehydes • Solvents

CELANESE PRIDE SERVES YOU RIGHT

**OILS, FATS & WAXES**

slowly the industry should see steadier pricing.

Linseed oil is said to be plentiful now that the harvest has been completed. Buying is strong, particularly from the paint industry, says a source. It is expected that demand from this quarter will begin to slack off in the next few weeks, as the paint industry slows down for winter.

**OLIVE OIL** — The price of this oil is quoted at \$8.00 per gallon for edible Spanish material in drums, and Italian B-type is quoted at \$5.40 to \$5.50 per gallon. Buying is described as very light right now, as ample inventories are allowing customers to wait for lower prices, with the new Spanish crop due for harvest in a month or so. One dealer speculated that buyers are going increasingly to the practice of blending olive oil with less expensive oils such as soybean or cotton-

seed, for re-sale as "blended" or "10 percent."

**PALM OIL** — The price of palm oil, strong for the past several weeks, is beginning to ease down. The reason cited by importers and brokers is the fact that India has sold back several thousand tons of palm oil, having bought heavily in recent weeks. It is move on India's part comes as part of an announced effort to boost sales of that and other oils.

Seeing the "biggest buyer making a big move," as one source says, led players in the market to believe that prices would fall. "With India backing out of the market, I don't know where else Malaysia will sell oil," says a source, who notes that consumer interest in general has been low, despite prices becoming too high to be competitive with other oils.

**FATS & GREASES**

**TALLOW** — Buyers in the tallow market are having a difficult time finding meat being offered, sources say. The remaining producers are holding back, waiting for strengthening in price, according to one source. At the moment, prices are flat and are expected to come up on later grades. Export interest at the Gulf is described as good, aided by an Egyptian purchase of 10,000 tons of tallow last week.

**Glycerine Marketer Named by Lever Bros.**

Unichema Chemicals Inc., Upper Saddle River, N.J., announced last week that, beginning January 1, it will assume marketing responsibilities for all glycerine produced by the Lever Brothers Co.

Earlier this year, Lever Brothers opened a new plant facility for the production of purity glycerine. The plant is designed to refine crude glycerine from both soap and fatty acid production. Dedicated storage facilities and rail cars will be maintained for national distribution.

Unichema Chemicals Inc. is the American marketing affiliate of a group of 12 olochemical companies operating worldwide under the business name Unichema International. Together, these companies annually produce more than 1 billion pounds of olochemicals and catalysts.

**Biotech Center Slated by US, State**

University and government officials break ground for the Center for Advanced Research in Biotechnology (CARB) later at the Shady Grove Life Sciences Center, Rockville, Md.

Established by the University of Maryland, the Commerce Department's National Bureau of Standards, and Montgomery County, Md., CARB is a joint venture involving the university and the federal, state and local governments. Biotechnology companies are expected to join the CARB research in areas of macromolecular design and modeling.

**MENHADEN FISH OIL**

Blown  
Kettle Bodied  
Kettle Bodied and Blown  
(To Match "CRYSTOLS")

**Herring Oil**

Blown  
Bodied and Blown  
(To Match "SELECTOLS")

Werner G. Smith, Inc.  
1730 Train Avenue  
Cleveland, Ohio 44113  
216-861-3678

**AROMATIC ORGANICS**

**Coaltar Pitch Makers Say Market May Have Bottomed**

Coaltar pitch producers say that import pressure, sluggish demand from the aluminum industry, and a relatively tight raw material picture have been making matters difficult for the industry this year. However, they say the market does appear to have stabilized in recent months.

In July, producers moved list prices down from \$10 to \$25 per ton to a level of \$250 to \$255 per ton for liquid material, and \$260 to \$265 per ton for solid material. Since then, list pricing has been stable, and selling prices, though possibly a bit on the soft side, have held fairly steady in most cases, producers say.

It is noted that import pressure is the most frequent contributor to significant price discounting. "Where imports are met, there is some decline" in pricing, says a producer, "but the basic price structure has been the same" since around mid-year. "Things are stable on the low side," concurs another producer.

Producers observe that price reductions in July were related to lower costs for crude tar. However, crude tar availability in the US is said to have tightened up noticeably over the second half of the year as a result of USX Corporation's steel strike. If the strike continues into next year, one coaltar producer says, crude tar pricing could be pressured upward.

**IMPORT PRESSURE WORSENS**

The pressure exerted on coaltar pitch pricing by imports has worsened this year, producers note. According to one producer, imports through the first eight months of the year accounted for 23.0 percent of the market, up from levels of 18.4 percent in 1985 and 13.7 percent in 1984.

The imports come primarily from Japan, China, Korea, Germany, and other European producers. Japan's penetration of the US market is said to have grown most notably, from 3.1 percent last year to 6.0 percent this year. The Chinese imports, handled by a US producer, reportedly are not as disruptive as the others.

The spot toluene market is quoted at 65¢ per gallon, equal to the low end of the 65¢ to 67¢ per gallon range of the previous week.

Xylene spot pricing is holding fairly steady at 79¢ to 80¢ per gallon range after firming up the previous week. Demand has slackened off a bit recently due to weakness in the para-xylene market, comments a trader.

Uncertainty over the crude oil picture is said to be prevalent in the market. "No one knows what the new Saudi oil minister will do," says one source; many market players would like to see some direction in the market before making strategic decisions, he adds.

Domestically, the January 1 effective date for the new Superfund bill has the potential to play a role in the market during the coming

# WHEN YOU NEED GLYCONE... COME TO US

Ethylene Glycol  
Triethylene Glycol  
Polyethylene Glycols  
Propylene Glycol  
Dipropylene Glycol  
Polypropylene Glycols

Atlanta (404) 321-4411  
Chicago (312) 920-3685  
Cleveland (216) 752-5100  
Houston (713) 520-3628  
Los Angeles (714) 898-9278  
New York (914) 253-7861  
London 44-1-584-5000  
Toronto (416) 441-7761  
U.S. Distributor Sales (713) 432-3866

Texaco Chemical Company

102-103

From  
Rhône-Poulenc:

**Styrene Oxide**

**Phenyl Ethyl Alcohol**

**World Largest Supplier**

Rhône-Poulenc Inc. Organic Chemicals Division  
Mannington Junction, New Jersey 08852, U.S.A.

Rhône-Poulenc Division Spécialités chimiques  
Cedex 29-92097 Paris-La Défense, France

Tel.: (201) 297-0100

Tel.: (1) 47-68-1234

ORGANIC INTERMEDIATES FROM RHÔNE-POULENC.

SCOF 861

13

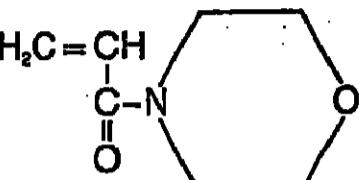
**AROMATIC ORGANIC EXPORTS: SEPTEMBER**

BUREAU OF CENSUS FIGURES IN POUNDS ON THE KEY AROMATICS.

	SEPTEMBER	\$ VALUE	AUGUST	\$ VALUE
Alylbenzenes, higher Benzene, pure	lb. 3,661,556	1,386,484	lb. 1,023,120	1,816,329
gal. 342,592	532,569	1,294,371	1,234,033	
lb. 6,942,442	3,618,494	5,385,080	4,201,442	
gal. 43,981,887	6,974,382	7,760,980	7,070,370	
Cyclohexane	lb. 307,887	312,281	378,671	1,051,177
gal. 15,111,200	2,100,000	40,000,000	5,852,007	
lb. 9,120,885	1,780,087	10,177,662	1,857,673	
gal. 1,750,768	918,934	3,008,272	1,322,294	
Dicyclohexanes	lb. 12,126,300	2,941,000	2,217,561	681,544
gal. 14,030,027	4,127,398	28,605,124	5,074,539	
Dimethylbenzene	lb. 27,380	26,986	1,977,631	681,688
gal. 501,830	218,688	408,204	178,015	
lb. 287,720	127,577	424,109	181,685	
gal. 77,840	180,383	77,770	111,976	
lb. 21,487,624	3,028,835	10,965,188	4,000,000	
gal. 5,056,880	1,400,000	3,500,000	554,282	
lb. 10,000,777	1,100,248	10,988,555	18,825,938	
gal. 2,210,685	2,445,428	5,116,183	3,642,772	
lb. 13,189,882	10,370,834	10,717,889	8,345,831	
gal. 2,091,378	1,991,391	1,400,023	1,349,930	
lb. 8,758,378	11,114,886	16,393,496	32,147,824	
gal. 3,285,216	3,081,008	2,508,098	2,284,391	

The World is our Source

## Acryloyl Morpholine



Manufactured By



Prompt Shipment from U.S. Stocks

## Fallek Chemical

2125 Center Avenue, Fort Lee, New Jersey 07024  
Telephone: (201) 592-8100  
CHICAGO • ST. LOUIS • LOS ANGELES

## CHEMICAL INTERMEDIATES

- 2-Diazo-1-Naphthol-5-Sulfonyl Chloride
- 2, 3, 4-Trihydroxy Benzophenone Ester of 2-Diazo-1-Naphthol-5-Sulfonic Acid
- o, p-Toluenesulfonamide
- o-Toluenesulfonamide
- p-Toluenesulfonamide
- 2-Furoyl Chloride
- b-Dimethylaminoethyl Chloride Hydrochloride — (DMC)
- b-Diethylaminoethyl Chloride Hydrochloride (DEC 50% Aqueous Solution)
- Benzyltriethylammonium Chloride
- Sodium-p-Toluenesulfinate



Specially Chemicals • Westbay Office Complex • 66 Quaker Lane • West Warwick, RI 02883

401-826-2990

## AROMATICS

weeks. An approximately 1.0¢ per gallon tax on basic aromatics, to be paid by the ultimate consumer, could result in some stocking up on material prior to the effective date, sources note.

However, it is said that year-end state taxes on inventories could counter the incentive for consumers to stock up. One benzene buyer estimates that taxes will take away about two-thirds of the savings, rendering a stocking up plan impractical unless the material can be used promptly. Another source observes that, because inventory taxes are based on value rather than volume, low taxes because of low BTX values this year are likely to encourage high inventory levels regardless of the superfund bill.

**MORPHOLINE** — Producers say that the market's growth rate is between zero and one percent this year, as both main outlets, tire production and water treatment, are mature.

Producers see little reason for trends in the tire industry over the past few years to reverse themselves. These include greater use of higher mileage tires, smaller tires, imported tires, and imported cars with tires on them.

In the water treatment area, it is pointed out that there has been a consolidation movement that has resulted in a temporary slippage in volume.

Pricing is quoted at 94¢ per pound in bulk, less a 6¢ per pound temporary voluntary allowance. While it is acknowledged that some discounting exists off this level, it is said to have been fairly stable over the past several months.

**TDI** — Olin Corporation says it is increasing selling price levels on toluene di-isocyanate by 6¢ per pound, effective December 1. New selling prices are not to exceed current list pricing which remains at \$1.01 per pound in jumbo tankcars, f.o.b. shipping point, minimum freight prepaid and allowed.

**TOLUENE SULFONYL CHLORIDE** — Biddle Sawyer Corporation says it has raised the price of its p-toluenesulfonyl chloride, which the company imports from Japan.

The price moves up 4¢ per pound to \$1.65 per pound for direct shipment from the previous list level of \$1.18 per pound which was established earlier this year. The effective date of the change is November 1. The new price for material from out of warehouse is \$1.70 per pound.

Biddle Sawyer attributes the price increase to higher Japanese and European currency values against the US dollar, and to lower production levels. p-toluenesulfonyl chloride is a byproduct of saccharine production, which has been in decline.

Need A Quick Study?

Chemical Profiles

## ORGANIC INTERMEDIATES FROM SWITZERLAND

for  
● pharmaceuticals ● flavors  
● agrochemicals ● fragrances  
● dyestuffs ● photochemicals

3,4-Dimethoxybenzaldehyde  
4-Aminoveratrole

3-Nitro-p-tolualic acid  
and other isomers

6,7-Dimethoxy-  
quinazoline-2,4-dione

4-Aminoacetophenone

5-Nitrosophthalic acid  
and derivatives

4-sec. Butylaniline  
and 2-sec. Butylaniline

Custom made intermediates  
against secrecy agreement

Our traditional processes:  
• nitration  
• catalytic hydrogenation and other routes

US Agents: HENLEY + CO, INC.  
750 THIRD AVENUE  
NEW YORK, NY 10117  
Phone (212) 988-3591

**SSF DOTTIKON**  
Swiss Chemicals Division  
CH-6005 Dottikon, Switzerland  
Phone (057) 78 11 14  
Telex 827 795 SFDS CH  
A privately owned Swiss firm

1,1,1-Trifluoro Ethane  
Ethyl Benzyl Chloride

1-Chloromethyl Naphthalene  
Dichloro Benzyl Chloride

p-Xylene Dichloride

p-Methyl Benzyl Chloride

o-Methyl Benzyl Chloride

CUSTOM MANUFACTURING  
CUSTOM DISTILLATION TO  
FULL VACUUM

**MONTCO**

Research Products, Inc.  
P.O. Box 235  
Hollister, Fla. 32047  
(904) 325-5504

## Du Pont Grooms

Continued from Page 7

envisioned for the newly modified resins, DuPont expects that it will be doing a lot of alloying, blending and reinforcing to tailor them to particular uses and needs, Mr. Gillespie said.

Dr. Pappas said that the attractive price and good performance characteristics will generate sales of about \$250 million for the resins worldwide within ten years. In addition to auto body parts, potentially large markets include printed circuit boards, microwave ovens and sports equipment, Dr. Pappas said.

A DuPont plant at Chattanooga, Tenn., which previously produced polyester resins for fibers, has now been converted to a 15-million-pound-a-year development facility for polyarylates. This one plant is larger than all installed capacity of competitors, Dr. Pappas claims.

World-scale manufacturing operations, using existing facilities and DuPont's proprietary low-cost polyarylates process, should come on stream before 1990, the DuPont executive said.

When world-scale facilities come on stream, DuPont expects to be able to lower the price to a level that will be competitive with prices of premium grades of polycarbonates, he said.

Pfizer Picks Ashland As Its Distributor

The Chemical Division of Pfizer Inc. has appointed Ashland Chemical Company as its national distributor of food and beverage ingredients and specialty chemicals, supplementing Pfizer's own direct sales and distribution programs.

Ashland operates seventy-four chemical distribution centers in the US.

## Reillex Crosslinked Polymers



## Bound To Perform.

We've Got Your Pyridine Right Where You Want It.

Now Reilly has something better than a pyridine: a pyridine in crosslinked polymer form.

You know what that means. An insoluble, reusable, odorless reagent. A simpler process. More performance. Fewer hassles.

If you're looking at a catalysis, acid scavenging, or metal recovery operation, look to Reillex™ polymers.

The Weak-Base Resin That Keeps On Working.

Reillex™ poly-4-vinylpyridines offer excellent thermal stability, performing at temperatures up to 260°C. Their high vinylpyridine content makes for unusually high

exchange capacity—up to 8.8 meq/g. Their macroreticular structure makes them suitable for aqueous or non-aqueous applications. Reillex™ resins simplify isolation and improve product purity. Best of all, they're reusable and simple to regenerate.

### IMPORTANT FEATURES OF REILEX™ POLYMERS

	402	425
powder	●	●
bead	●	●
Insoluble in <i>all</i> solvents	●	●
Tough physical form suitable for batch reactions	●	●
Bead shape for column use	●	●
Porous, macroreticular structure	●	●
Suitable for aqueous and non-aqueous applications	●	●
Stable at high temperatures	●	●
Broad pH stability	●	●
Suitable for gas phase reactions (fixed or fluid bed)	●	●

Three Forms,  
Three Ways  
To Keep It Simple.

Reillex™ 402 and 402-I are pharmaceutical and industrial grade powders, respectively, suitable for batch liquid processing. New Reillex™ 425 beads are ideal for liquid or vapor phase, column, batch, or continuous processing.

How To Put Our Pyridine Where You Want It.

To learn what Reillex™ polymers can do for your process, request Reillex™ Report #2. Contact Reilly Tar & Chemical Corp., 1510 Market Square Center, 151 N. Delaware St., Indianapolis, IN 46204. (317) 248-6411. FAX (317) 248-6413.

**Reilly**  
The pyridine solution.

**JIM Walter resources, Inc.**  
Aromatic Sulfonic Acids

Benzene Sulfonic Acid, 90% / Toluene Sulfonic Acid, 94% / Xylene Sulfonic Acid, 94%

Phenol Sulfonic Acid, 65% / Toluene Sulfonic Acid, High Para / Chlorobenzene Sulfonic Acid

Custom Water and Methanol Blends Available

Jim Walter Resources also produces aromatic sulfonic chlorides, and a complete line of rigid urethane foam chemicals including FOAMSTAB™ surfactants, FOAMOL™ polyester polyols and FOAMCAT™ potassium octoate catalyst.

Jim Walter Resources, Inc. Coke, Iron & Chemicals Division  
PO Box 5327 • Birmingham, Alabama 35207 Telephone: 205/841-5940

## CHLOROBENZENES

### 1, 2, 4, Trichlorobenzene (PURE AND ELECTRICAL GRADES)

PARADICHLOROBENZENE • MONOCHLOROBENZENE • ORTHODICHLOROBENZENE  
(HIGH PURITY AND TECHNICAL GRADES)

### TETRACHLOROBENZENES

MURIATIC ACID 20° & 22° Be

1,2,3 TRICHLOROBENZENE

Standard Chlorine Chemical Co., Inc.  
1035 Belleville Turnpike, Kearny, NJ 07032 • Tele. (201) 997-1700 Telex 120-1000

# CUSTOM CHEMICALS UNBEATABLE QUALITY!

## MOLECULES MADE TO ORDER

YOUR MARK OF  
EXCELLENCE FOR  
CUSTOM CHEMICALS



Whenever you need a supplementary - or primary - high-quality manufacturing source for bulk pharmaceuticals, specialty chemicals or intermediates, we hope you'll think of Rutgers-Nease.

We're reliable, and fully experienced in a wide range of reactions. Our equipment includes glass and stainless steel reactors, centrifuges, filters and dryers. And we pride ourselves on our strict adherence to all government regulations.

Call or write today to arrange a conference in your offices or ours on how we can meet your custom production needs.

Contact Dr. John Wetzel, Director of Commercial Development

### Ruetgers-Nease Chemical Company, Inc.

201 Struble Road, State College, Pennsylvania 16801  
(814) 238-2424 TWX No. 5106703533

*At Ruetgers-Nease, we do custom chemicals uncommonly well.*

### Janus Green B (C.I. No. 11050)

- Aldrich-produced
- High purity
- Available from stock
- Attractive bulk prices

For orders call toll-free 800-558-9160.  
For technical information call toll-free 800-231-8327  
and ask for Dr. Tom Wickersham, ext. 433.

**Aldrich chemical co.**  
P.O. Box 355, Milwaukee, Wisconsin 53201 USA • (414) 273-3880

### Warner-Lambert

Continued from Page 7

oped in clinical studies for three indications: symptomatic premature ventricular contractions, ventricular tachycardia, and postinfarction arrhythmias. Results to date indicate that "Pirmeval" is an effective antiarrhythmic drug with an excellent safety profile, the company says.

The company said that it is continuing its research program in the area of coronary artery disease, with principal concentration on the lipid-regulating therapies. The company's lead compound in this area, "Lopid" (gemfibrozil), is currently marketed in 36 countries, including the US, where it is the market leader in its category.

The company also said that trimetrexate has potential use in the treatment of opportunistic infections such as toxoplasmosis and pneumocystis carinii pneumonia. Patients with AIDS are particularly susceptible to such opportunistic infections. Early experimental studies in AIDS patients at the National Institutes of Health and the National Cancer Institute indicate a 70 percent success rate with patients suffering from pneumocystis carinii when treated with trimetrexate in combination with the commercially available folate substitute leucovorin.

The company said it is continuing to conduct clinical studies to extend its gemfibrozil franchise beyond patent expiration in 1989. "Lopid" is also the subject of a continuing study in Finland.

In the field of cancer chemotherapy, the

company said it has a number of compounds in various stages of clinical investigation worldwide. One of these compounds, trimetrexate, has shown efficacy in phase II multicenter clinical trials against non-small cell lung cancer, which accounts for 75 percent of total lung cancer cases. It also has shown early efficacy against other solid tumors.

### US-Canada Trade

Continued from Page 4

sions to both the US and Canada; the elimination of non-tariff barriers, such as inadequate protection of intellectual property; and the establishment of a binding dispute settlement mechanism.

In addition, Mr. Foveaux says US import remedy laws and procedures should not be suspended under any agreement with Canada.

Exports to Canada account for about 10 percent of the US chemical industry's total sales, and are valued at \$22 billion annually.

"Although it's one of the few industries providing a trade surplus to the nation, a growing trade deficit, that surplus is decreasing annually," Mr. Foveaux told *Chemical Week*.

The Commerce Department estimates a chemical trade surplus will diminish this year. US chemical trade with Canada leads all other countries.

The talks between the North American neighbors began a year ago. Major sticking points include such issues as how to free the flow of pharmaceuticals, lumber and other goods.

### 10TH INTERNATIONAL CONGRESS OF ESSENTIAL OILS, FRAGRANCES & FLAVORS BEING HELD AT OMNI SHOREHAM HOTEL IN WASHINGTON, D.C. NOVEMBER 16-20, 1986

REGISTRATION FOR SINGLE DAY ATTENDANCE  
CAN STILL BE MADE BY CALLING:

**THE FMA-FEMA OFFICE IN WASHINGTON  
TEL: (202) 293-5800 OR TELEXING 288617**

ASK FOR MR. EARL KLINGER

THE REGISTRATION FEE FOR ANY SINGLE DAY:

\$200.00	\$300.00
FOR TWO DAYS	\$300.00

### A GREAT OPPORTUNITY TO MEET:

- THE PRODUCERS OF NATURAL RAW MATERIALS FROM ACROSS THE GLOBE.
- THE SCIENTISTS AND PERFUMERS WHO USE THESE RAW MATERIALS IN THE COMPOUNDS THAT SPELL SUCCESS: FAILURE TO CONSUMER PRODUCTS.
- AND THE EXECUTIVES WHO ORCHESTRATE THE FLAVOR & FRAGRANCE INDUSTRY.
- THE PRESENTERS OF 87 SCIENTIFIC PAPERS COVERING NATURALS AND SYNTHETICS.



## ALIPHATIC ORGANICS

### Methanol Excess

Continued from Page 3

quently, Du Pont, in partnership with Phillips, reopened its 250-million gallon plant in Beaumont in the Spring. This new working capacity will boost US methanol production to 1.13 billion gallons this year, according to one seller, up from just over 900,000 gallons in 1985.

At the same time, imports continue to flow into the country. Imports topped 350 million gallons in 1985 and are projected to climb to just under 390 million gallons this year. One observer says this imported material is making up the bulk of the inventory overhang.

This supply surge is coming at a time of outstanding growth for MTBE. Sources queried estimate that between 200 million gallons and 250 million gallons of methanol will be consumed in producing MTBE this year, up from under 100 million gallons last year. And the pace of growth is not expected to slacken. For next year, estimates for methanol consumption in MTBE production range from 280 million gallons to 350 million gallons.

This growth, however, has been partly offset by reduced use of methanol fuel blends this year. The revocation of the Petrocoal waiver last Spring, coupled with Arco's decision to cease marketing "Oxino" in April has cut into methanol consumption. James Crocco, of Houston-based Crocco Associates, projects that methanol use in fuel blends will fall from 70 million gallons last year to 23 million gallons in 1986. He projects the total will further decline to 17 million gallons next year, unless the recent removal of restrictions on the "DuPont waiver" by Environmental Protection Agency spurs additional use.

### INDUSTRY REACTION MIXED

Industry reaction to the re-introduction of the DuPont waiver was mixed, however. Most sources said the EPA decision would not have a significant near term impact on methanol sales. The waiver allows a gasoline mixture containing 5 percent methanol and 25 percent co-solvent alcohols (mainly ethanol), provided the blender adheres to an evaporation index designed to limit increases in fuel volatility.

For years, the use of methanol in fuel blends has come under sharp attack from some auto makers and oil companies because of its corrosiveness. Sources agree that convincing consumers that methanol is safe, effective fuel component is critical to the alcohol's success as an octane ingredient. Another key to methanol's future as a fuel ingredient is the long-term octane outlook. Several sources note that gasoline blenders' lead credits are running low, and the price for octane components such as toluene and

it, one observer states, one of the keys to success, Mr. Crocco, says, is changing the perception of methanol as a gasoline extender to that of an octane enhancer.

In addition to the psychological obstacles, methanol marketers must overcome several logistical hurdles to putting methanol into fuel. Distribution is one factor. Methanol cannot be shipped through pipelines, so sources see its markets limited to coastal areas where it can be moved in bulk on barges, from the plants and the landing points of the imports. In addition, blenders' tanks must be carefully dried out, the butane removed, and the vapor pressures changed.

Another problem with the DuPont waiver, sources note, is monitoring the fuel blends to make sure small blenders don't pump in too much low-cost methanol. Mr. Crocco says there is nobody to police the waiver, and there are people "who will misuse and abuse it." A methanol seller who remembers the abuses taken in the past says "the people who got us in trouble the first time will come back," blending fuels with illegally high methanol contents.

Ironically, DuPont says it won't pursue the fuel methanol business, and Arco appears to

### ALIPHATIC ORGANIC EXPORTS: SEPTEMBER

BUREAU OF CENSUS FIGURES IN POUNDS ON THE KEY ALIPHATICS

	SEPTEMBER	AUGUST
Acetic Acid.....	12,864,688	1,286,077
Acetone.....	1,922,428	865,681
Acrylonitrile.....	78,799,461	17,882,481
Acrylic Acid.....	78,799,461	17,882,481
Acetone.....	8,219,388	3,888,881
Acetone.....	13,060,939	2,880,179
Acetone.....	11,125,545	2,284,188
Acetone.....	4,120,000	1,174,818
Acetone.....	3,390,198	2,020,048
Acetone.....	19,334,416	2,642,533
Acetone.....	18,904,732	4,883,247
Acetone.....	5,682,042	1,288,544
Ethylene Dichloride.....	68,223	165,013
Ethylene Glycol.....	2,255,202	205,483
Formaldehyde.....	45,200,287	6,992,983
Glycerine (Crude).....	1,246,085	225,495
Glycerine (Refined).....	502,071	522,880
Glycol.....	1,134,268	1,185,888
Glycol.....	4,244,303	2,820,810
Glycol.....	3,475,083	929,149
Glycol.....	5,459,672	1,681,968
Glycol.....	5,459,672	1,681,968
Methyl Ethyl Ketone.....	10,372,933	1,724,768
Methyl Methacrylate.....	1,810,883	240,388
Percarbonate.....	777,031	584,389
Polyethylene Glycol.....	13,376,008	7,333,384
Propyl Alcohol.....	20,872,821	15,379,597
Propylene Glycol.....	6,158,086	1,578,108
Vinyl Acetate.....	22,943,887	9,000,085
Vinyl Chloride.....	6,085,549	1,387,284
Vinyl Chloride.....	67,152,886	13,259,333
Vinyl Chloride.....	58,152,887	14,911,433



### World Leading Producer

#### ■ PMP Sodium Gluconate F.C.C.

99.5% purity; free-flowing crystals.  
Meets F.C.C. specifications.

#### ■ PMP Liquid Gluconate 60

Stabilized, noncrystallizing.

#### ■ PMP 50% Gluconic Acid

#### ■ PMP Glucono Delta Lactone F.C.C.

A U.S. Company of Fujisawa Group  
**PMP FERMENTATION PRODUCTS, INC.**  
7870 N. Port Washington Road • Milwaukee, Wisconsin 53217  
(414) 352-3001 • To order, call (800) 558-1031 • Telex: 240446



**TANABE U.S.A.. INC.**  
P.O. Box 85132  
San Diego, California 92138  
(619) 571-8410  
TWX: 910-335-1557

### Octanoyl Chloride (Capryloyl Chloride)

**WHITE** CHEMICAL CORPORATION

PO BOX 2500 NEWARK, NJ 07114  
TELEPHONE 201-621-4100 TELEX 844131  
OUTSIDE NJ CALL TOLL FREE 1-800-225-4226



### ETHYL ALCOHOL, 190-200 PROOF

- ALL FORMULAE SDA • PURE • CDA • INDUSTRIAL SOLVENTS
- HIGHEST QUALITY • RELIABLE SUPPLY

CALL OR WRITE

• (203) 323-2876 • 24 RICHMOND HILL AVE., STAMFORD, CT 06904

November 10, 1986 CHEMICAL MARKETING REPORTER

## DMDM HYDANTOIN

COSMETIC  
PRESERVATIVE

MCINTYRE  
CHEMICAL  
COMPANY  
4851 S. ST. LOUIS AVENUE  
CHICAGO, IL 60632  
TWX 900-311-9450

312-927-2401

## ALIPHATICS

have given up on "Oxitol" for the time being. Apparently, blending methanol into motor fuel won't be attempted on a large scale, even considering the growing need for octane, at least through 1987, sources indicate.

Meanwhile, producers must push for better methanol margins. While supply currently outstrips demand, one producer says things have happened or will happen to improve the supply-demand balance in 1987. For one thing, he estimates that methanol consumption in MTBE will grow by another 100-million gallons next year. In addition, Sterling Chemical says it will shut its 100-million gallon methanol plant in Texas City, Tex., early next year. The producer also says USI, who purchased Du Pont's Deer Park

plant, is unlikely to re-open the facility before mid-1987. The forced shutdown of a methanol plant in Malaysia will help reduce the import glut, and lower cost natural gas has helped push US methanol exports over 230 million gallons through August, three times higher than last year.

**ETHYLENE** — Producers say the industry's October 2c per pound price initiative was partially successful, earning them between 1c and 1c per pound. Prices are quoted between 14c and 16c per pound, with 14½c being the most common figure.

Contracts will be up for negotiation at the end of November and December, though there is doubt if producers will galvanize contracts more until the end of the year.

Monthly contract negotiation seems to have evolved during the second half of this year. One producer explains that traditionally prices were set quarterly, but were renegotiated downward after that, the quarterly price acting only as a price ceiling.

Now, he says, with sellers in a more advantageous position, buyers have conceded to allow the monthly negotiation to go either direction, depending on market conditions. One producer believes September marked this year's first full-fledged quarterly negotiation. "Quarterly pricing is a volatile feedstock market is not easy," one marketer says.

The coming months look to be seller dominated. Recently published NPIRA figures third quarter production indicate an industry operating rate in the high 90's. One producer says the industry's current 1.2 billion gal inventory represents only a 13 day supply. Consequently, inventory building is likely to be the trend for the next three to six months in preparation for turnarounds in the second quarter of next year.

**PERCHLOROETHYLENE** — Support gathering behind Dow Chemical's 2c per pound price initiative (CMR, 11/7/86, pg. D-1) aimed at December 1.

Occidental Chemical says it is increasing off-schedule perchloroethylene prices by 1c per pound, effective December 5. Yukon Materials has indicated it will support the increase although it has not made an official announcement.

One source notes that perchloroethylene has traditionally been priced in the same range as trichloroethylene, as production costs are about the same. Currently, however, trichloroethylene prices are around 22c per pound, f.o.b. tanks, while perchloroethylene is closer to 17c per pound, he says.

Producers say that DuPont's decision to purchase rather than produce chlorine solvents has not tightened the market considerably, since the company contracted for material beforehand. Producer spot rates are said to be somewhat higher, however, and the DuPont closure should be some support to the perch move.

Also supporting the increase is the effect of the dollar's weakening on import material prices. While producers disagree on whether import volume has been affected, all feel there is pressure on importers to increase prices likewise.

Meanwhile, chlorinated solvent producers note that an October 1 price increase of 2c per pound on methylene chloride seems to be holding successfully.

## IMC Completes Sale Of Industrial Unit

International Minerals & Chemical Corporation has completed the sale of substantially all of the company's industrial products business to Applied Industrial Materials Corporation headed by president and chief executive officer, Charles P. Gallagher, and vice president, New York City Investment Firm of Peck & Greer.

Mr. Gallagher was formerly president and chief executive officer of SpecialtyChem Corporation.

Terms of the sale, originally announced last July, were not disclosed.

Included in the transaction are former mines, plants and organizations involved in the production and marketing of iron products, ferroalloys and metal, ferrous minerals and quartz products.

George D. Kennedy, IMC chairman and chief executive officer, says "the divestiture of the industrial products business is the final step in IMC's restructuring plan."

A spokeswoman for Brigham and Women's Hospital says that the experimental drug dissolved the lung clots in 37 out of 40 patients tested. Heparin, the drug usually used, has a success rate of only about 6 percent.

## Vinyl Chloride

Continued from Page 5

radioactive air pollutants, and also conflicts with past decisions of the appeals court.

He said NRDC will probably ask the full 11-member appeals court to review the decision.

When the 1984 Supreme Court ruling "is taken to its extreme, it's difficult to think of what Congress could do to eliminate ambiguity," Mr. Doniger remarked. "It's hard to imagine a statute that is clearer than the Clean Air Act when it says health is the only factor to be considered."

EPA says the 1976 vinyl chloride regulations would be easier to enforce than the current law and would therefore be more protective of public health.

Under current rules, vinyl chloride discharges are prohibited except in emergencies that cannot be prevented by the producing plant. If emissions can be prevented, they are not considered emergencies and are subject to penalties.

EPA has proposed that instead of prohibiting all but emergency releases, plants should be allowed four to seven discharges per year, depending on the size and location of the plant.

EPA has regulated vinyl chloride since 1975 and says that as a result of its rules, airborne emissions of the cancer-causing chemical from the 50 US production plants have declined from 105,000 tons annually to less than 6,400 tons. Cancer causes were estimated to have declined from 11 to one-half per year.

## US-Canada Trade

Continued from Page 4

**PERCHLOROETHYLENE** — Support gathering behind Dow Chemical's 2c per pound price initiative (CMR, 11/7/86, pg. D-1) aimed at December 1.

Occidental Chemical says it is increasing off-schedule perchloroethylene prices by 1c per pound, effective December 5. Yukon Materials has indicated it will support the increase although it has not made an official announcement.

One source notes that perchloroethylene has traditionally been priced in the same range as trichloroethylene, as production costs are about the same. Currently, however, trichloroethylene prices are around 22c per pound, f.o.b. tanks, while perchloroethylene is closer to 17c per pound, he says.

Producers say that DuPont's decision to purchase rather than produce chlorine solvents has not tightened the market considerably, since the company contracted for material beforehand. Producer spot rates are said to be somewhat higher, however, and the DuPont closure should be some support to the perch move.

Also supporting the increase is the effect of the dollar's weakening on import material prices. While producers disagree on whether import volume has been affected, all feel there is pressure on importers to increase prices likewise.

Meanwhile, chlorinated solvent producers note that an October 1 price increase of 2c per pound on methylene chloride seems to be holding successfully.

**IMC Completes Sale  
Of Industrial Unit**

International Minerals & Chemical Corporation has completed the sale of substantially all of the company's industrial products business to Applied Industrial Materials Corporation headed by president and chief executive officer, Charles P. Gallagher, and vice president, New York City Investment Firm of Peck & Greer.

Mr. Gallagher was formerly president and chief executive officer of SpecialtyChem Corporation.

Terms of the sale, originally announced last July, were not disclosed.

Included in the transaction are former mines, plants and organizations involved in the production and marketing of iron products, ferroalloys and metal, ferrous minerals and quartz products.

George D. Kennedy, IMC chairman and chief executive officer, says "the divestiture of the industrial products business is the final step in IMC's restructuring plan."

A spokeswoman for Brigham and Women's Hospital says that the experimental drug dissolved the lung clots in 37 out of 40 patients tested. Heparin, the drug usually used, has a success rate of only about 6 percent.

Two other drugs, urokinase and streptokinase, are more effective than "Heparin," but are not often used because of side effects.

National Institute of Health figures show that more than 300,000 Americans are hospitalized each year for lung blood clots and the disorder claims 50,000 lives annually.

TPA has been tested since 1983 because of its ability to dissolve clots that cause heart attacks. The drug is currently under investigation by FDA, and approval is expected by June of next year.

## CUSTOM DISTILLATION

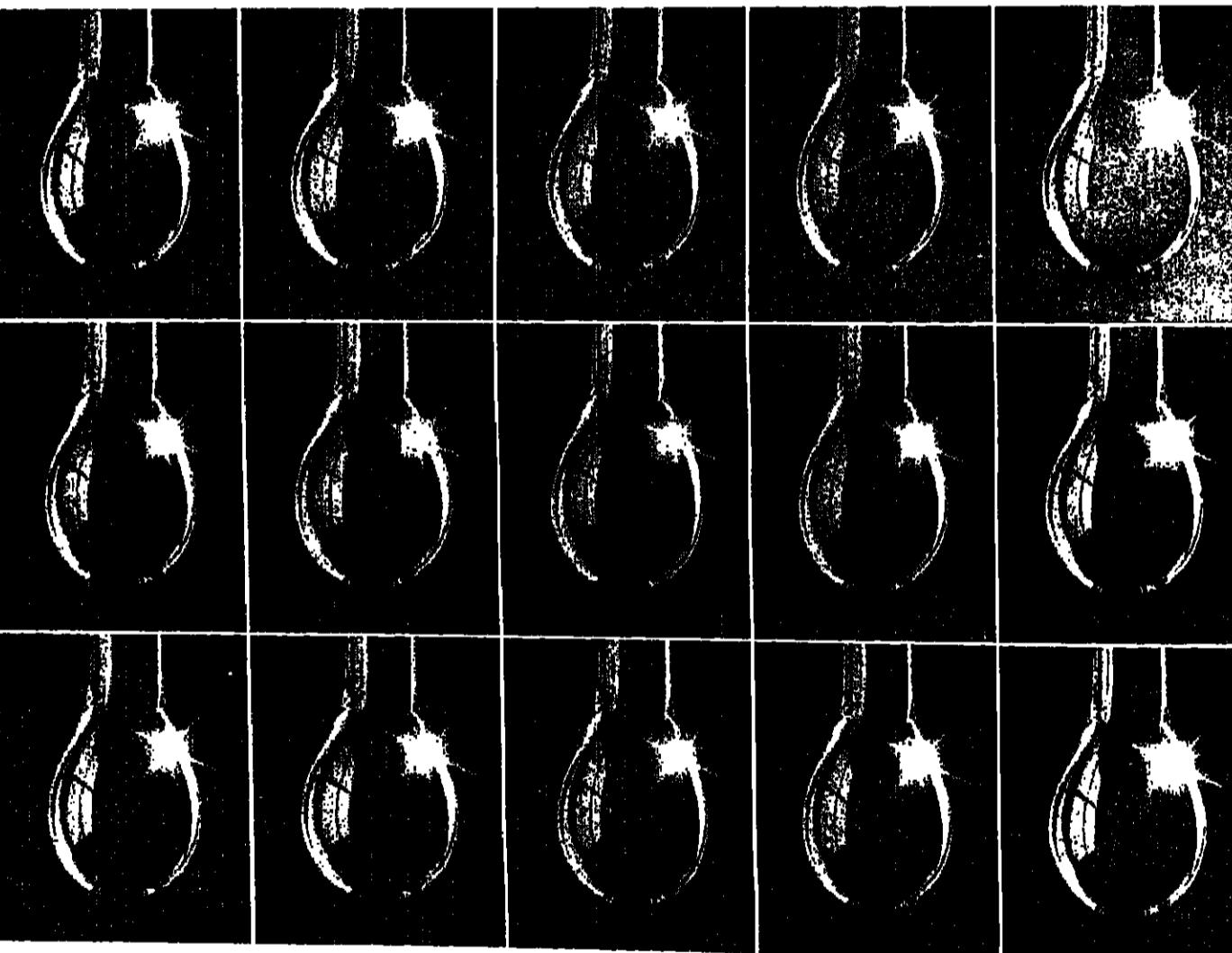
- FRACTIONATION • RECOVERY
- PRECISE LABORATORY CONTROLS

"Consistent and Uniform High Quality"



LINDAU CHEMICALS INC.  
COLUMBIA, SOUTH CAROLINA 29202  
P.O. BOX 641  
(803) 799-6863

## Purely predictable. GPC ethyl alcohol.



Some things never change: Drop to drop, truck to truck, railcar to railcar, barge to barge... GPC ethyl alcohol remains absolutely uniformly unvaryingly pure.

The reasons behind GPC purity are clear. Unlike producers who may switch between different starting materials, GPC uses only one source — corn — for reliable uniformity. And unlike producers who offer a wide variety of chemical solvents, GPC employs a staff of specialists whose only concern is ethyl alcohol. By

specializing, we're able to produce and market a complete line of superior ethyl alcohol products.

GPC's technical representatives provide timely, accurate information and assistance on ethyl alcohol formulations and government regulations. This expertise, together with a nationwide network of reliable distributors, provides ethyl alcohol products and solutions for your special needs.

Now you know what to expect every time you order GPC ethyl

alcohol. The same pure product... the same expert service... time after predictable time. Write: Grain Processing Corporation, 1600 Oregon St., Muscatine, IA 52661. Or call (319) 264-4265 or Telex 468497.

**Clearly Superior Ethyl Alcohol**  
© 1986 Grain Processing Corporation

## Organosulfur Facility Is Set by Pennwalt

Pennwalt Corporation's board of directors has approved the expansion of the Organic Chemical Division's methane sulfonic acid/methane sulfonyl chloride plant in Wyandotte, Mich., by 6 million pounds per year.

The plant will also produce ethane sulfonic acid, ethane sulfonyl chloride and other specialty organosulfur products.

## INTRODUCING

# "SUPER" GLYCOL DIETHERS

No, there aren't any unique chemical additives to our Glycol Diethers. What makes them "Super" is a human additive! With SpecialtyChem you get:

**SUPER TECHNICAL SUPPORT** and superb personal attention from the world's Number One Glycol Diether manufacturer. For example, call on us for counsel on your applications ... and write for any of these helpful technical bulletins:

- "SpecialtyChem Glycol Diethers"
- "Glycol Diethers vs. THF"
- "Glycol Diethers for Electronics"
- "Glycol Diethers in Grignards"
- "Glycol Diethers for Phase Transfer Catalysts"
- "SpecialtyChem Custom Manufacturing Services"
- "Propylene Glycol Diethers"

**SUPER QUALITY:** State-of-the-art manufacturing facilities and rigid production controls insure consistent high quality.

**SUPER DELIVERY:** Our two manufacturing sites assure fast, reliable delivery in pails, drums or bulk ... generally from inventory.

**SUPER PRICE:** SpecialtyChem is aggressively competitive. Try us and see!

**CUSTOM MANUFACTURING:** Our modern pilot plant and high tech manufacturing plants enable us to do custom manufacturing of Glycol Diethers and other organic ethers and specialty chemicals. Working with us is like having your own specialty manufacturing capability to meet your unique needs.

Do what so many chemical buyers are doing. Ask us for samples and price quotations ... and find out why the chemical industry has made us Number One in Glycol Diethers.

**SpecialtyChem™**  
SpecialtyChem Products Corporation  
Member ChemDesign Group, Two Stanton St.  
Marinette, WI 54143, (715) 735-9033

Chemical  
Solutions

# STEROIDS

## THE SINGLE SOURCE FOR STEROIDS.

Berlichem is a name that's synonymous with steroids. For a very simple reason. No matter what you need, we can supply it. With unsurpassed speed, convenience, economy and above all, quality.

That's because Berlichem offers the most complete line of steroids available: estrogens, progestogens, anabolics, androgens and basic and advanced corticosteroids.

But that's just the half of it.

We also offer an extensive line of steroid intermediates, nonsteroidal active compounds, and nonactive fine chemicals.

With a product range as comprehensive as this, chances are good we have just what you need. But if you have special requirements, we can custom manufacture the product that best meets your application.

© Berlex Laboratories, Inc., 1986. All rights reserved.

## 50 YEARS OF STEROID EXPERIENCE.

Even more impressive than the quantity of our steroids is the quality of our steroids. Berlichem has over 100 years of worldwide bulk pharmaceutical manufacturing expertise, as well as 50 years of steroid experience.

But no matter what product we make or how many years we've been making it, one thing never changes: our uncompromising commitment to quality.

## ONE CALL GETS IT ALL.

To take advantage of the quality, service, convenience and economy only Berlichem can provide, call us toll free at 1-800-221-1756. In New Jersey call collect, 201-694-4100.

Or write Berlichem, 300 Fairfield Road, Wayne, New Jersey 07470.



BERLICHEM IS A DIVISION OF BERLEX LABORATORIES, INC., A SUBSIDIARY OF SCHERING AG WEST GERMANY (NOT ASSOCIATED WITH SCHERING-PLough CORPORATION OR SCHERING CORPORATION OF NEW JERSEY).

# BERLICHEM

## DRUGS & FINE CHEMICALS

### Domestic Glycine Seen Firmer; Import Prices Also Increasing

Domestic glycine prices have firmed throughout 1986, and are expected to continue doing so for at least part of 1987, according to producers. Imported glycine is also said to have firmed.

The current trend reversed a pattern that resulted after capacity expansion and a strong US dollar drove pricing downward in 1983. The capacity expansion was considered a contributory factor because demand never increased as much as was expected.

List prices for domestic glycine remain at \$2.12 per pound for USP grade, and \$1.88 per pound for technical grade. The two domestic producers are Chaiten Chemicals & W.R. Grace. Imports, particularly from Japan, play an important role in the market place.

Domestic spokesmen say that actual selling prices vary, but are commonly between five and ten percent below list prices. One spokesman claims that sales at 10 percent below list are becoming rare.

#### WEAK DOLLAR CITED

The US dollar's weakening is cited as the main reason for firming prices. Producers complain that recent selling prices have been too low for a healthy profit. Because of the dollar, importers are also raising their prices, and one importer concedes that his company's prices are close to those of the domestic companies.

"There's still a slight premium for domestic material," he says, but admits that the difference is not great. He thinks, however, that import pricing will remain stable for the rest of 1986 and the beginning of 1987.

Glycine imports rose by about 57 percent through August 1986, compared to the same period in 1985. Through August, 1.1 million pounds of glycine entered the US, compared to a little less than 700,000 pounds through August 1985. Japan, the main exporter to the US, has increased US sales to 995,000 pounds this year, up from 626,000 pounds. Importers claim that demand has been healthy, despite the dollar's devaluation.

**BHT** — PMC Specialties Group, Inc. is increasing its prices for both the technical grade and food grade of BHT. PMC markets the technical grade under the name "CAO-1" and the food grade under the name "CAO-3." The increases are 5¢ per pound, effective January 1. A PMC spokesman says that import stabilization is allowing for the increase. BHT's price last increased about two years ago, says the spokesman.

**POTASSIUM & SODIUM HYDROXIDE** — Mallinckrodt, Inc. recently raised its prices for both potassium hydroxide and sodium hydroxide. Effective November 1, the increases range from 2 to 8 percent, depending on quantity.

New prices for potassium hydroxide, NF pellets, are \$1.33 per pound for a truckload, and \$1.69 per pound for one drum. Prices for ACS pellets are \$1.49 per pound for a

truckload, and \$1.89 per pound for one drum. Truckload quantities of sodium hydroxide in the form of NF pellets, are \$1.06 per pound, while one drum costs \$1.35 per pound. The ACS pellets cost \$1.09 per pound in truckload quantities, and \$1.38 per pound for one drum.

For both products, truckload quantities

#### PRICES TRENDLINES

WEEK ENDING NOV. 6, 1986

#### CHANGES/UP

Ascorbic Acid, \$1 per kilo  
B, \$2 per kilo  
B, \$2 per kilo  
B, \$2 per kilo  
D-cal pan, \$1 per kilo

#### CHANGES/DOWN

None

#### DRUGS INDEX

The Drugs & Fine Chemicals Index reflects the prices of 10 representative materials in this sector and the quantity of each produced in 1985.

Nov. 6, 1986 .....	211.16
Oct. 31, 1986 .....	211.16
Oct. 10, 1986 .....	211.16
Nov. 7, 1985 .....	211.16

Chemical Prices Start on Page 36

are 24,000 pounds, while each drum contains 110 pounds.

According to a Mallinckrodt spokesman, prices are increasing for the first time in about two years, and are doing so now because of rising manufacturer costs. The spokesman estimates current growth between 3 and 6 percent annually.

**SORBATES** — Mitsui & Company is raising its prices for both potassium sorbate and ascorbic acid, effective December 1. Mitsui is the exclusive US distributor for Daicel Chemical Industries, Ltd., and Nippon Gohsei.

Prices for both products will be rising 30¢ per pound. Twenty thousand pounds or more will cost \$2.50 per pound, delivered; 10,000 pounds to 19,000 pounds will cost \$2.60 per pound, delivered; 3,000 pounds to 9,000 pounds will cost \$2.70 per pound, delivered; 1,000 pounds to 2,900 pounds will cost \$2.80 per pound, delivered; and less than 1,000 pounds will cost \$2.80 per pound, f.o.b. closest warehouse.

A Mitsui spokesman claims that increased costs from suppliers prompted the increase. Prices for these products last increased in May. Other players are currently examining the increases.

**VITAMINS** — BASF Wyandotte and Duophar Nutrition are raising their prices for several vitamins, effective immediately. Both companies are raising their B6 price



## Let The Knoll "Caffeine Guarantee" Make You A Winner!

Because we make, stock and ship more caffeine than anyone, we can guarantee quality and on-time delivery of

**Caffeine Anhydrous**

USP

*Call Us...*

to order, request samples or our free caffeine catalog.  
Knoll Fine Chemicals • (212) 752-9520  
120 East 56th Street, New York, New York 10022  
DMF reference available on request



knoll ...makes it better to run better



**Napp**  
The only name in  
**NYSTATIN**  
**USP**

**you need to know**  
**A superior antifungal**  
**antibiotic.**

Write or Call

**Napp Chemicals Inc.**

199 MAIN ST., P.O. BOX 900, LODI, N.J. 07644  
(201) 773-3900 (212) 695-5686  
TELEX 134649 FAX (201) 773-2010

## NIACINAMIDE USP

R.W.  
*Greiff*  
& CO., Inc.

Serving the  
Chemical Industry  
since 1880  
1445 East Putnam Avenue  
Old Greenwich, Conn. 06870  
203/637-4371  
64 Orland Square Drive, Suite 110  
Orland Park, IL 60462  
312/460-0772  
901 Dove St., Suite 228  
Newport Beach, CA 92660  
714/478-0810  
N.Y. Telline: 212/246-9860

## POTASSIUM IODIDE EDDI

From the specialists in iodine technology for over 30 years

**WESTAGRO**

# DAVOS

## Intermediates

- N,O-Bis-(Trimethylsilyl)Trifluoroacetamide
- 1,8-Diazabicyclo [5.4.0] Undecene-(7)
- 1,2-Phenylene Phosphorochloridite
- 2-Amino-4,6-Dimethoxyxypyrimidine

- 2,4,6-Trichlorophenyl Hydrazine
- N,N'-Dicyclohexylcarbodiimide
- Sodium Para Toluenesulfinate
- 3-Amino-4-Chlorobenzoic Acid
- Acetylene Dicarboxylic Acid
- Diphenyl Disulfide
- Pyruvic Acid
- Squaric Acid
- Piperidine

Please Contact:

**DAVOS** CHEMICAL CORPORATION

2500 Lemoine Ave., Fort Lee, NJ 07024, (201) 461-5810 Telex: WU 135-422 TEL: 17715 DVS UT. Cable: Davoschem

November 10, 1986  
0081/01 150000000000

## Hoechst Launches

Continued from Page 3

Celanese spokesman Herb Reed, but Mr. Macomber is expected to depart once the merger is completed. He will walk away with the proceeds from his current holdings in Celanese stock — about 75,000 shares — plus additional compensation.

American Hoechst says the acquisition is being financed through internally generated funds and private borrowings. While analysts do not foresee Hoechst selling off large chunks of Celanese to pay for the purchase, it is anticipated that some assets might be sold.

Les Ravitz, chemical analyst at Salomon Brothers, says there is "no question" that Hoechst will sell off some Celanese assets, but he does not look for any "fire sales."

Analysts speculate that some commodity lines, such as methanol and formaldehyde, might be sold. Also mentioned is Celanese's 57 percent equity stake in Celanese Canada and its methanol project in Saudi Arabia. Last year, Celanese took a \$21 million write-down of the value of its methanol venture in Saudi Arabia. The company also placed its Clear Lake, Tex., methanol plant on standby.

Commenting on the proposed merger, Mr. Macomber said last week that "it provides both companies with an unprecedented opportunity to accelerate and expand their growth in world markets." Celanese, he said, "gains access to new technologies, research and development expertise and new product lines."

Dieter zur Loye, president and chief executive of American Hoechst, observed that the two firms "practice complementary categories of chemistry which fit smoothly together."

The Hoechst subsidiary posted sales last year of \$1.7 billion, with fibers and film accounting for \$623 million of the total, followed by specialties (\$422 million), petrochemicals and plastics (\$316 million) and health-care and the company's Agri-Vet unit (\$333 million combined).

Celanese reported sales last year of approximately \$3 billion, with fibers account-

ing for roughly half of total sales, followed by chemicals and specialty products.

Hoechst AG recorded world sales of \$1 billion in 1985 and \$8.8 billion in the first half of this year. The company is approximately 24 percent-owned by Kuwait.

Following the merger announcement last week, Standard & Poor's affirmed its "A+" commercial paper rating for Hoechst Optical Corporation, noting that the parent company in Germany has "built sufficient debt capacity over the past several years to make a large acquisition without sacrificing credit quality." Standard & Poor's also said the "maturity and cyclical" of Celanese's commodity business "poses less of a concern in the context of Hoechst's diversified business."

S&P put Celanese's various debt ratings at "CreditWatch," which means the rating may be raised, lowered or affirmed.

WEGO CHEMICAL & MINERAL CORP.

417 Northern Blvd.  
Great Neck, N.Y. 11021  
(516) 487-3510

Telex: RCA 289948 WEGO  
Charleston, S.C. .... (803) 795-5179  
Houston, Texas ..... (713) 469-7473

Potassium Ferricyanide  
Potassium Ferrocyanide  
Sodium Ferrocyanide (Y.P.S.)

Sodium Benzoate  
Citric Acid  
Inositol  
Methyl Salicylate

Potassium Permanganate  
Oxalic Acid  
Sulfamic Acid  
Sodium Hexametaphosphate  
Sodium Tripolyphosphate  
Sodium Hydro sulfite  
Sodium Thiosulfate

## Animal Drugs Set for Review

An international committee of veterinary drug experts has recommended review of several commonly used livestock drugs to establish international agreement on the safety of residues from the drugs in food products, according to a USDA official.

"The Codex Committee on Residues of Veterinary Drugs in Food has established a list of seven animal drugs for which the committee recommends international scientific review in order to reach agreement on allowable levels of residues from the drugs in food," said Lester M. Crawford, associate administrator of USDA's Food Safety Inspection Service and chairman of the committee.

The list includes growth-promoting hormones, the antibiotic chloramphenicol, sulfa drugs and four other classes of drugs.

Mr. Crawford said that, in compiling the list, the Codex Committee considered any substance administered to agricultural animals, including hormones and externally applied pesticides, that could leave a residue in food products such as meat, milk, eggs or fish. He said the initial list includes the seven substances which the committee believes deserve top priority, and that the committee may recommend other drugs for review at a later date.

The Codex Committee on Residues of Veterinary Drugs in Food is a new committee established by the Codex Alimentarius Commission, an international group of experts who work toward the adoption of common international food standards to protect consumers and promote fair trade.

The Codex Committee held its first meeting, attended by 175 representatives from 40 countries and 10 international organizations, last week at the US State Department. Both

the commission and the committee are supported and funded by the United Nations' Food and Agriculture Organization, the World Health Organization and participating nations.

Mr. Crawford said the development of the committee's list is a "significant" first step toward international agreement on veterinary drug issues, including the establishing of common allowable levels of veterinary drug residues in food. Currently, there exist wide variations among countries in animal drugs allowed and in the maximum residues permitted.

"Because of advances in science, we can now detect substances that are present in food in parts per billion or even parts per trillion in some cases," Mr. Crawford said.

"Unfortunately, some countries use this capability to prohibit the use of certain drugs whose residues can be detected but are not likely to be harmful, while other countries may allow the entry of products containing residues of substances almost universally viewed as unsafe. There is a great need for international standardization," he said.

## Centocor Plans New Partnership

Centocor, Inc., Malvern, Pa., says it plans to form a research and development limited partnership to fund the development and clinical testing of a therapeutic product for the treatment of hospital-based gram negative infections and three cancer imaging products.

The partnership intends to fund the development of these products with the private placement of approximately \$50 million of limited partnership interests to selected qualified investors. In connection with the offering of the limited partnership interests, Centocor will issue warrants to purchase approximately 1.7 million shares of Centocor Common Stock.

**Cilag** **CILAG AG**  
Schaffhausen, Switzerland



**Custom Synthesis Service in Europe for U.S. Drug Companies By American Drug and Chemical Manufacturer Located in Switzerland**

Please contact  
**SST** **S.S.T. CORPORATION**  
Pharmaceuticals - Intermediates - Vitamins - Fine Chemicals  
635 Braddock Road, Clifton, New Jersey 07012 (201) 473-4300  
Toll Free: (800) 222-0921  
Cable: SST CORP CLIF  
Tele: WU 133342  
Tele: RCA 219149

**FINE CHEMICALS**  
Toll Free! JUST A PHONE CALL AWAY



The highest quality fine chemicals and intermediates. From Hüls, a German technical leader, totally committed to serving the needs of America's chemical industry.

Hüls fine and intermediate chemical products include compounding ingredients and intermediates for flavors and fragrances, pharmaceuticals, agricultural chemicals, plastics additives, coatings, inks, dyes:

For product information and samples call toll-free:

**1-800-631-5275**

In New Jersey, telephone toll-free:

**1-800-352-4920**

(EXT. 5339) Or check items of interest,

fill in and mail this ad to:

Nudex Inc. (A Hüls Company) P.O. Box 365 Piscataway, NJ 08854

Name \_\_\_\_\_  
Title \_\_\_\_\_  
Company \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_  
State \_\_\_\_\_ Zip \_\_\_\_\_

**hüls**

**acic** LTD.

60 St. Clair Ave. East, Suite 304, Toronto, Ontario M4T 1N5 Canada  
Tel: (416) 961-5681 Telex: 06-22138 FAX: (416) 961-0900

Your source of bulk pharmaceuticals

**Amitriptyline HCL**  
**Chlorpromazine HCL (U.S. Made)**  
**Chlorthalidone**  
**Dipyridamole**  
**Disopyramide Phosphate**  
**Methyldopa (U.S. Made)**  
**Thioridazine HCL**

Drug Master Files Available

# duphar

"If you're talking nutrition,  
you're talking about us."

## FOLIC ACID USP

Ask also about these fine products:

- Cholecalciferol
- Ergocalciferol
- Vitamins D<sub>2</sub> and D<sub>3</sub>
- Dry Stable USP
- d-Calcium Pantothenate
- Pyridoxine Hydrochloride
- Niacin USP

duphar can provide you with custom vitamin formulations to meet your specific nutritional requirements. duphar is ready to serve you with experience, quality products, manufacturing resources and warehousing facilities across the U.S.

Call (800) 323-9092 (800) 851-8276 in Illinois

**duphar nutrition**

DUPHAR NUTRITION, INC. Member of the SOLVAY GROUP  
2 East Madison St., Waukegan, IL 60085 • Sedgehill Drive, Thomasville, NC 27360

## Avery Raises \$1-Billion-Plus For Acquisition

Avery Incorporated, a diversified manufacturer headquartered in New York, has raised more than \$1 billion through a private placement of debt and equity securities to finance its previously announced acquisition of Uniroyal Chemical Company.

As a result of the transactions, Triangle Industries, Inc., which previously owned about 20 percent of Avery's shares, will have a total participation of 45 percent in Avery's common stock, but Avery will not be a subsidiary of Triangle and the latter will have no responsibility for the liabilities of Avery and its subsidiaries.

In the first step, Triangle made a further equity investment in Avery of \$75 million in the form of preferred stock, plus warrants to purchase 40 million additional shares of Avery common stock at \$1.875 per share.

In addition, Avery issued \$100 million principal amount of 10 percent convertible subordinated debentures due 1996 which are convertible into Avery common stock at \$3.25 per share.

Uniroyal Chemical Holding Company, a wholly-owned subsidiary of Avery, issued \$350 million principal amount of 12.25 percent subordinated notes due 1996.

Uniroyal Chemical Acquisition Corporation, a wholly owned subsidiary of Uniroyal Chemical Holding, issued \$210 million principal amount of 11.5 percent subordinated notes due 1995 and \$350 million principal amount of increasing rate senior notes due 1988 bearing an initial annual interest rate of 9 percent.

In addition, Avery issued warrants to purchase 12 million shares of Avery common at \$2.50 per share to Drexel Burnham Lambert Incorporated, which acted as advisors to Avery in connection with the acquisition of Uniroyal Chemical and the related financing.

Avery intends to seek shareholder ap-

proval to increase its authorized capital from 15 million common shares currently to at least 150 million.

As a result of this financing, Avery Chemical Holding has approximately \$8 million in excess cash to be used for general corporate purposes, including possible acquisitions. Also, it is expected that the \$10 million of increasing rate senior notes will be financed in the near future with a bank or through another private placement of debt.

### Huls Markets IPDI In Bulk to the US

Huls, the West German chemical manufacturer, recently made its first bulk shipment of isophorone diisocyanate (IPDI) from

China to the United States.

The company has manufactured the

material in Europe for 30 years and supplies sole supplier of IPDI to the world.

IPDI is used in the synthesis of liquid

and weather-resistant polyurethane coating

systems. Applications include coatings

and high-solids two-component paints,

lacquers, solvent-free PU compounds

coatings, powder coatings, solvent-free

coatings for baking enamel, physically

drying PU resins for coatings

on substrates.

The company has manufactured the

material in Europe for 30 years and supplies

sole supplier of IPDI to the world.

IPDI is used in the synthesis of liquid

and weather-resistant polyurethane coating

systems. Applications include coatings

and high-solids two-component paints,

lacquers, solvent-free PU compounds

coatings, powder coatings, solvent-free

coatings for baking enamel, physically

drying PU resins for coatings

on substrates.

The company has manufactured the

material in Europe for 30 years and supplies

sole supplier of IPDI to the world.

IPDI is used in the synthesis of liquid

and weather-resistant polyurethane coating

systems. Applications include coatings

and high-solids two-component paints,

lacquers, solvent-free PU compounds

coatings, powder coatings, solvent-free

coatings for baking enamel, physically

drying PU resins for coatings

on substrates.

The company has manufactured the

material in Europe for 30 years and supplies

sole supplier of IPDI to the world.

IPDI is used in the synthesis of liquid

and weather-resistant polyurethane coating

systems. Applications include coatings

and high-solids two-component paints,

lacquers, solvent-free PU compounds

coatings, powder coatings, solvent-free

coatings for baking enamel, physically

drying PU resins for coatings

on substrates.

The company has manufactured the

material in Europe for 30 years and supplies

sole supplier of IPDI to the world.

IPDI is used in the synthesis of liquid

and weather-resistant polyurethane coating

systems. Applications include coatings

and high-solids two-component paints,

lacquers, solvent-free PU compounds

coatings, powder coatings, solvent-free

coatings for baking enamel, physically

drying PU resins for coatings

on substrates.

The company has manufactured the

material in Europe for 30 years and supplies

sole supplier of IPDI to the world.

IPDI is used in the synthesis of liquid

and weather-resistant polyurethane coating

systems. Applications include coatings

and high-solids two-component paints,

lacquers, solvent-free PU compounds

coatings, powder coatings, solvent-free

coatings for baking enamel, physically

drying PU resins for coatings

on substrates.

The company has manufactured the

material in Europe for 30 years and supplies

sole supplier of IPDI to the world.

IPDI is used in the synthesis of liquid

and weather-resistant polyurethane coating

systems. Applications include coatings

and high-solids two-component paints,

lacquers, solvent-free PU compounds

coatings, powder coatings, solvent-free

coatings for baking enamel, physically

drying PU resins for coatings

on substrates.

The company has manufactured the

material in Europe for 30 years and supplies

sole supplier of IPDI to the world.

IPDI is used in the synthesis of liquid

and weather-resistant polyurethane coating

systems. Applications include coatings

and high-solids two-component paints,

lacquers, solvent-free PU compounds

coatings, powder coatings, solvent-free

coatings for baking enamel, physically

drying PU resins for coatings

on substrates.

The company has manufactured the

material in Europe for 30 years and supplies

sole supplier of IPDI to the world.

IPDI is used in the synthesis of liquid

and weather-resistant polyurethane coating

systems. Applications include coatings

and high-solids two-component paints,

lacquers, solvent-free PU compounds

coatings, powder coatings, solvent-free

coatings for baking enamel, physically

drying PU resins for coatings

on substrates.

The company has manufactured the

material in Europe for 30 years and supplies

sole supplier of IPDI to the world.

IPDI is used in the synthesis of liquid

and weather-resistant polyurethane coating

systems. Applications include coatings

and high-solids two-component paints,

lacquers, solvent-free PU compounds

coatings, powder coatings, solvent-free

coatings for baking enamel, physically

drying PU resins for coatings

on substrates.

The company has manufactured the

material in Europe for 30 years and supplies

sole supplier of IPDI to the world.

IPDI is used in the synthesis of liquid

and weather-resistant polyurethane coating

systems. Applications include coatings

and high-solids two-component paints,

lacquers, solvent-free PU compounds

coatings, powder coatings, solvent-free

coatings for baking enamel, physically

drying PU resins for coatings

on substrates.

The company has manufactured the

material in Europe for 30 years and supplies

sole supplier of IPDI to the world.

IPDI is used in the synthesis of liquid

and weather-resistant polyurethane coating

systems. Applications include coatings

and high-solids two-component paints,

lacquers, solvent-free PU compounds

coatings, powder coatings, solvent-free

coatings for baking enamel, physically

drying PU resins for coatings

on substrates.

The company has manufactured the

material in Europe for 30 years and supplies

sole supplier of IPDI to the world.

IPDI is used in the synthesis of liquid

## PLASTICIZER #8

(AN EQUIVALENT TO "SANTICIZER 8")

"FROM THE FLEXIBLE SUPPLIER"



PLEASANTVILLE, NY 10570  
TEL (914) 769-9110  
TLX 229639

CALL FOR INFO  
ON THIS & ALL OUR  
CHEMICAL PRODUCTS

\*SANTICIZER IS A TRADEMARK OF MONSANTO CO.



We're growing bigger without losing our personal touch.

**FLORASYNTH**

Flavors and Fragrances

Executive Offices: 410 E. 62nd Street  
New York, New York 10021

Worldwide Creative Centers,  
Manufacturing Facilities, and Sales Offices

## PERFUMES & FLAVORS

overs from 1985 to supply tightness with Indian ginger crops expected to be smaller than usual. Spot prices firmed \$6 to \$30 per pound in the past two weeks for Indian ginger oil. Chinese ginger oil prices have remained at \$23 to \$24 on the spot market but are expected to increase.

"The farmers didn't plant near as much as we thought they would," says one essential oils broker. "Rather than take a chance on the prices that they considered low, they changed to other crops altogether." Demand has been steady for ginger oil (CMR, 10/20/86, pg. 34), leading sources to anticipate further price increases. Estimates on the size of the 1986 India ginger crop range as low as half of the total 1985 production.

### SEEDS AND SPICES

CASSIA — Prices for cassia continue to

climb as dealers try unsuccessfully to obtain material from Indonesia. The "marketing board" will not make any offers until November 12, forcing prices on the limited amount of available cassia to firm. "We've tried to buy merchandise," says one spice broker. "But they're keeping us in the dark."

Spot prices for Indonesian "A" 3.5/4.0% increased from \$1.08 to \$1.10 per pound to \$1.15 to \$1.20 per pound. Other Kortajaya prices increased 2c. to 4c. per pound. The futures market responded similarly, up 2c. per pound for cassia delivered from April through April, 1987.

Another broker says price firming in the past three weeks was in anticipation of a "single selling system" rather than the product scarcity or increased demand. The system will not allow buyers to choose shippers they wish to patronize. Buyers have been scrambling to get as much cassia from those shippers they consider efficient and reliable before the system was instituted.

He adds that smaller Indonesian shippers and newcomers to the international market stand to benefit a great deal by securing large orders that wouldn't otherwise be placed with them. But problems arise when an outfit doesn't have the personnel facilities to guarantee the product will meet US sanitary requirements.

Sources predict that the "marketing board" will set a floor price on November 1 and "gradually try to increase cassia price throughout 1987, testing whatever the market will bear." Until actual offers are made, emphasizes one source, prices reflect the material on hand, and that is diminished rapidly.

## EPA Standards Limit Emissions

Environmental Protection Agency has set final standards under the Clean Air Act limiting emissions of particulate matter and oxides of nitrogen from industrial steam generating boilers.

The new standards are expected to reduce emissions of particulate matter (PM) — smoke and soot, by approximately 10 tons per year nationally. Oxides of nitrogen ( $NO_x$ ) emissions would drop by approximately 25,000 tons per year.

These represent about a 40 percent reduction in the growth of PM and about a 1 percent reduction in the growth of  $NO_x$  emissions from new steam generating units created by these standards.

The rules apply primarily to industrial boilers, but include the largest industrial and commercial steam generating units and the smallest utility boilers.

Next to utilities, these steam generating units are the largest stationary sources. Distributors of PM and  $NO_x$  emissions from fossil-fuel-fired steam turbines and industrial plants. The rules require all new units with over 100 million Btu/hr capacity to meet the stringent standards.

EPA initially adopted standards of performance limiting PM,  $NO_x$ , and sulfur dioxide ( $SO_2$ ) emissions from fossil-fuel-fired boilers in 1971. Those rules applied only to the largest industrial boilers and utility boilers greater than 250 million Btu/hr.

The agency revised the standards relating to electric utility boilers in 1978, proposing new standards for PM and  $NO_x$  emissions from units greater than 100 million Btu/hr in June 1984. In June 1986, the agency proposed new limits requiring  $SO_2$  reductions for boilers larger than 100 million Btu/hr. These rules finalize the June 1981 PM and  $NO_x$  proposal.

EPA estimates the national cost of the standards will be about \$35 million per year. This represents an increase of less than one percent over baseline in the annualized costs associated with the installation of new industrial commercial and institutional steam generating units. The incremental costs of reducing the particulate matter and about \$1.10 per ton of  $NO_x$  under this rule are about \$1.10 per ton of particulate matter and about \$1.00 per ton of oxides of nitrogen.

Under civil suit brought by the Sierra Club and the Natural Resources Defense Council, the U.S. District Court for the District of Columbia ordered EPA to strengthen PM and  $NO_x$  standards by November 1, 1986.

## COATINGS & PLASTICS

### Recycled PET, Plastics Establish Growing Base

Recycled plastics are slowly establishing an identity in the market. Currently, all major plastics, particularly polyethylene terephthalate, polypropylene, high density polyethylene and nylon are being recycled and resold. Not only are larger plastics producers recycling their own material for resale, but small companies specializing in plastics recycling are now marketing recycled materials to molders, extruders and plastics compounders; some are developing their own lines of finished products.

According to John Molloy, of the Plastics Bottle Institute, a division of SPI, these companies specialize in PET recycling; they buy soft drink bottles, grind, clean and recycle them into flaked PET, which they then sell to molders or make into finished sheet.

Various sources describe the market for recycled PET as ranging from 100 million to 150 million pounds per year; merchant markets for recycled nylon, PE and PVC are much smaller; sources relate that they are still in the developmental stages, and at present their size cannot be determined.

Of the twenty companies currently involved in the recycled PET business, the three largest are Nyconn Industries, Cl., Wellman Industries Inc., S.C., and St. Jude Polymer Inc., Pa.

**PET IS FOCUS**

Steve Babinechak, president of St. Jude Polymer, reports that his firm concentrates on PET soft drink bottle recycling, although they also recycle base-cup HDPE. The company sells over 10 million pounds of recycled PET per year, and about 2 million pounds of HDPE, he says. It makes the recycled PET into crystal and solid state polymerized pellets, which are sold for 35 to 40 cents per pound; these are made into materials used primarily in engineering plastics applications, and as metal in packaging applications.

The company has been in business for 9 years; currently it faces stiff competition from a major manufacturer of virgin PET, which is said to be selling less expensive material.

Despite these setbacks, Mr. Babinechak is confident of future success and continued annual growth, mostly through new finished plastic applications. He reports that the company will be starting a joint venture with a New England firm, to be announced in the first quarter of 1987.

In the research and development area, St. Jude is working on pilot recycling projects with the Coca Cola Bottling Company, Indiana Institute of Technology, Michigan State University and Toledo University, with projects ranging from research into recycling these materials. It is not yet doing so on a commercial basis.

To meet anticipated future growth, the company plans to double its PET recycling capacity to 20 million pounds by June of 1987.

A spokesman for Wellman Industries Inc.

### PRICES TRENDLINES

WEEK ENDING NOV. 7, 1986

#### CHANGES/UP

None

#### CHANGES/DOWN

None

#### COATINGS INDEX

The Coatings & Plastics Index reflects the prices of 13 representative materials in this sector and the quantity of each produced in 1985.

Nov. 7, 1986	306.4
Oct. 31, 1986	306.4
Oct. 10, 1986	306.4
Nov. 8, 1985	306.4

Chemical Prices Start on Page 38

## Argus can meet your phosphate and antioxidant requirements.

Argus has over 30 years of experience in phosphates and antioxidants, and we're always ready to use our knowledge to solve our customers' problems.

For example, our alkyl and aryl phosphites are used to maintain the useful properties of plastics, rubber and synthetic fibers. And they're also used in the manufacture of pharmaceuticals.

Our combination of technical know-how and delivery capability is unbeatable in the industry.

### Argus Division.

For more details, write to: Argus Division, Witco Corporation, 633 Court Street, Brooklyn, NY 11231-2193. Or call 718-858-5678.

**Witco**



**WHAT'S AS RELIABLE  
AS YOUR FIRST ORDER  
OF ASARCO  
ANTIMONY OXIDE?**



**YOU GUessed IT...  
YOUR SECOND ORDER!**

It makes sense to buy your antimony oxide from Asarco, a leading U.S. producer of this proven flame retardant material. All grades of our antimony oxide have uniform high quality, plus low impurity levels. And we're not halfway around the world when you need special attention.

Asarco antimony oxide is available in Low Tint, High Tint, Very High Tint and Ultra-Pure grades. Our Omaha, Neb., plant blends 30,000 pounds of antimony oxide at one time to assure a uniform product in every truckload. Your benefit: more consistent processing in your plant.

We ship antimony oxide in 50-pound multi-wall bags, palletized and stretch-wrapped for easy handling. Our new warehouse in Columbus, Ohio, offers fast service to our customers in the East and Midwest. For current prices and prompt delivery call: ASARCO Incorporated, 180 Maiden Lane, New York, N.Y. 10038. Tel. (212) 510-2147.

**ASARCO**

Some People Commit Child Abuse Before Their Child Is Even Born.

According to the surgeon general, smoking by a pregnant woman may result in a child's premature birth, low birth weight and fetal injury. If that's not child abuse, then what is?

AMERICAN CANCER SOCIETY

### PLASTIC RESIN SALES & OUTPUT: AUGUST

SPI'S COMMITTEE ON RESIN STATISTICS REPORTS.

	SALES AND USE (1,000 LBS)	PRODUCTION (1,000 LBS)
1986	1985	1986
THERMOSETTING RESINS:		
Epoxy resins (unmodified) .....	30,728	31,693
Urethane .....	9,458	10,087
Phenolic .....	103,834	94,345
Polyester .....	102,021	103,821
Vinyl .....	225,354	221,247
Maleic anhydride resins .....	16,052	16,961
ACRYLIC/PLASTIC RESINS:		
Acrylic acid/Butadiene Styrene (ABS) .....	80,351	81,630
Acrylic alcohol .....	13,460	12,205
Polymethyl methacrylate (PMMA) .....	613,288	565,489
Polycrylate .....	627,742	622,483
Polyethylene .....	787,258	727,523
Polypropylene .....	513,057	439,689
Acrylonitrile-Butadiene-Styrene (SAN) .....	7,030	6,745
Polystyrene .....	361,826	340,178
Polycarbonate .....	—	377,467
Other .....	—	339,970

# Cesium Chemicals

Now available from a  
*new domestic producer*  
known for quality  
and service for over  
70 years.

FOR MORE INFORMATION CONTACT:  
SPECIAL PRODUCTS DIVISION



CHEMICAL COMPANY  
1500 Eighth St. LaSalle, IL 61301

800-435-6856

(In Illinois, 800-892-6831)  
(From Canada, 815-223-1500)

# HYDROCHLORIC ACID

20° Baume  
FOOD GRADE

CABOT

CAB-O-SIL® Division

CABOT CORPORATION

Box 168 Tuscola, Illinois 61963

217-283-3370

Phone: 800/222-6745 (in Illinois 800/252-3705)

Available in  
Tank Car and Tank Truck

## GROUND CHEMICAL IRON (IRON FILINGS)

ELIZABETH  
NEW JERSEY  
200 S. SECOND ST.  
172-3262  
201-383-3262

CONNELLY-GPM, INC.  
SINCE 1876

CHICAGO, IL.  
3154 S. CALIFORNIA  
AVE.  
60608  
312-247-7231

## WESLIG and WESCHEM LIGNOSULFONATES

AMMONIUM  
CALCIUM  
SODIUM

From  
WESCO TECHNOLOGIES, LTD.  
P.O. Box 3880  
San Clemente, Calif. 92672-1680  
(714) 661-1142  
TELEX (GRT) 3718858 WESLIG

DISPERSANTS  
BINDERS  
VISCOSITY DEPRESSANTS

RAILCARS  
TRUCKLOADS

## FERTILIZER CHEMICAL OUTPUT: AUGUST

CENSUS BUREAU NUMBERS IN SHORT TONS ON KEY FERTILIZERS

	AUGUST	JULY	AUGUST
Ammonium, syn., anhyd.	1,097,432	1,007,510	1,018,212
Ammonium nitrate	377,198	380,471	378,048
Ammonium nitrate/water solutions	182,226	145,212	140,400
Monammonium phosphates	73,093	40,333	40,333
Other ammonium phosphates	84,710	40,771	40,771
Ammonium sulfate	156,926	155,409	155,409
Diammonium phosphate	714,738	685,480	685,480
Nitric acid	451,601	446,480	446,480
Phosphoric acid	705,764	2,000,551	1,978,000
Sulfuric acid	2,077,120	140,000	140,000
Superphosphate, concentrated	35,443	20,000	20,000
Superphosphate, normal & enriched	1,053,516	20,000	20,000
Superphosphate and other phosphate fertil.	472,505	20,000	20,000

\*Bulk rates lower than catalog prices.

## HEAVY & AG CHEMICALS

### PVS Announces Sulfuric Hike In Depressed Chicago Market

In an attempt to firm up prices in the depressed Chicago-area market, PVS Chemical Inc. has announced an increase in off-list prices for sulfuric acid. The hike is for shipments from its Chicago, Ill., plant and is effective January 1, 1987, or as contracts allow.

The new price for 68 degree Baume acid will increase by \$6 per ton, 68 degree Baume basis, not to exceed current schedule of \$64.50 per ton.

The price of 80 degree Baume and 98 percent acid will increase by \$6.35 per ton, 100 percent basis, not to exceed current schedule of \$79.25 per ton.

In addition, all grades of oleum will increase by \$5.35 per ton, 100 percent basis, not to exceed schedule of \$82.25 per ton, 100 percent basis.

Major suppliers in the area include C-I-L, which markets Canadian acid, Stauffer Chemicals, which produces in Hammond, Ind., and to a lesser extent, E.I. du Pont de Nemours & Co., which produces in Ohio and markets some Southwest smelter acid.

Sources say that prices have been stable for some time, but at levels that most consider to be unsatisfactory.

"Sulfuric acid producers are not making a great deal of money in that area," says one observer. Selling prices for large buyers are quoted in the \$62-to-\$65 per ton range, 100 percent basis, f.o.b. plant, considerably below list levels.

#### COST DRIVEN INCREASE

Most concede that if an increase is successful, it will be production cost, rather than supply-demand driven. Raw material sulfur prices have increased moderately over the course of the year, while sulfuric acid prices have stayed flat, or declined.

On the other hand, observers say that the Midwest, with Chicago being no exception, is amply supplied. St. Joe's Herculaneum, Mo., smelter acid plant is in the process of starting up, having been down since May. The company's presence in Chicago is minimal, however.

Asarco closed its Columbus, Ohio, zinc smelter early this year, but has been supplying that terminal from its El Paso, Tex., smelter.

The area's last significant plant closure was Du Pont's late-1984 East Chicago shutdown. Since then, Midwest demand has been relatively flat, while area producers continue to lose the fight against smelter acid imports from Canada.

According to Bureau of Census, through September 638,390 tons of sulfuric acid have entered the US from Canada, as opposed to 324,778 tons for the same period last year.

At the same time, says Department of Commerce, production in the Midwest has declined. Through August, 381,082 tons were produced in Illinois, a decline of 12 percent from the same period last year. Similarly, 234,952 tons were produced in Ohio through August, a decline of over 11 percent.

Sources now say that any increase in the area is likely to depend on the support of

#### BASES & SALTS

CHLORINE — Effective immediately for spot customers and as contract terms allow, Pennwalt is increasing the price of bulk chlorine by \$20 per ton, not to exceed \$195 per ton for shipments from either Portland, Ore. or Tacoma, Wash.

Pennwalt is also increasing prices for ta-

chlorine by 5¢ per pound.

The price of 80 degree Baume and 98 percent acid will increase by \$6.35 per ton, 100 percent basis, not to exceed current schedule of \$79.25 per ton.

In addition, all grades of oleum will in-

crease by \$5.35 per ton, 100 percent basis,

not to exceed schedule of \$82.25 per ton,

100 percent basis.

The Heavy & Ag Chemicals index reflects the prices of 18 representative materials in this sector and the quantity of each produced in 1985.

Nov. 7, 1986 ..... 113.0

Oct. 31, 1986 ..... 113.0

Oct. 10, 1986 ..... 113.0

Nov. 8, 1985 ..... 113.0

Chemical Prices Start on Page 38

## YOU GET A LOT OF KODAK WITH EVERY KILO.

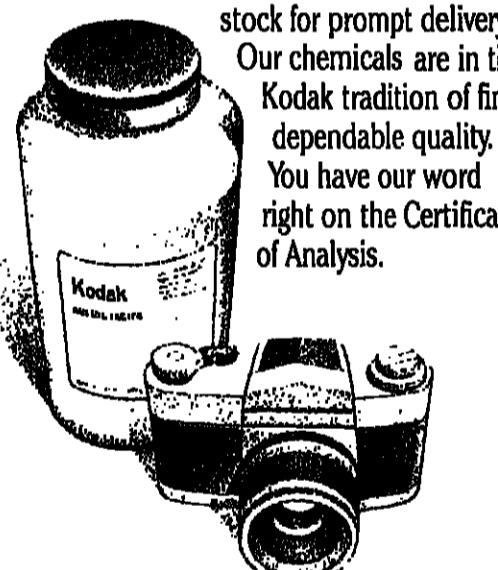


we've filled out our field and technical service with extra attention to making it your way.

Whatever you need, call Kodak for that something extra in fine chemicals. We want to do business with you.

### YOU GET CATALOG CONVENIENCE WITH MORE THAN 3,800 BULK CHEMICALS.

If you see a product in the catalog, it means we have larger bulk quantities in stock for prompt delivery.\* Our chemicals are in the Kodak tradition of fine, dependable quality. You have our word right on the Certificate of Analysis.

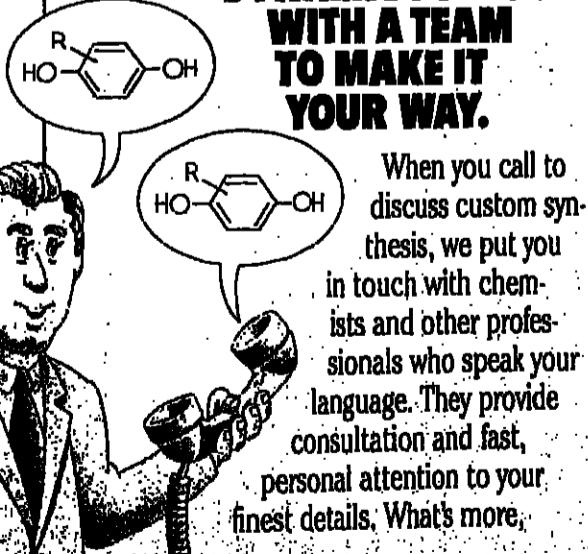


### YOU GET CUSTOM COMPOUNDS WITH A BACK-UP BANK OF OVER 300,000.

Our commitment to research and development has produced a bank of over 300,000 compounds we can draw on to meet your extra special needs for custom synthesis. We invite you to explore that experience—with complete confidentiality when you want it. Call us and find out if we already have what you're looking for.

### YOU GET EXCLUSIVE EXPERIENCE WITH OVER 100 YEARS IN FINE CHEMICALS.

You can start with us and stay with us because we're committed to your business. And we grow with you as you scale up to tank car fulls. Today we offer you specialized analytical, environmental, toxicological and regulatory support capabilities to meet all your requirements and serve you better.



When you call to discuss custom synthesis, we put you in touch with chemists and other professionals who speak your language. They provide consultation and fast, personal attention to your finest details. What's more,

### YOU GET A FREE KILO BUYER'S CATALOG.

Call 1-800-225-5352 (in New York State, 1-716-458-4014) for your free Kilo Buyer's Catalog, complete with ordering information, bulk quotation request card, and a fine chemicals listing by molecular formula and functional group.

Call 716-458-7951 for information on our competitive quoting and sampling procedures. Or call to have a Kodak representative visit and discuss fine chemicals with you.

Eastman Kodak Company, Laboratory and Research Products Division, 343 State Street, Rochester, N.Y. 14650.



LABORATORY AND  
RESEARCH PRODUCTS DIVISION  
EASTMAN KODAK COMPANY  
ROCHESTER, NY 14650

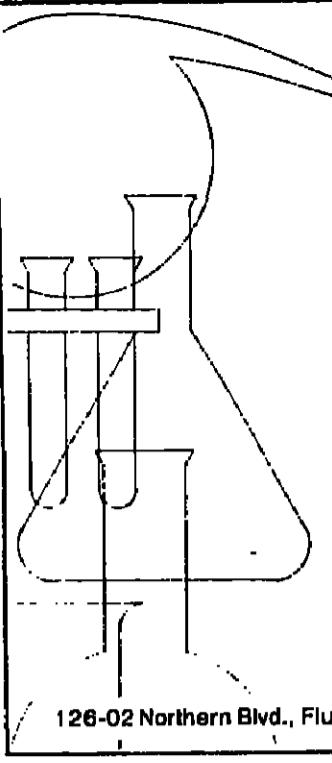
© Eastman Kodak Company 1986

ELIZABETH  
NEW JERSEY  
200 S. SECOND ST.  
172-3262  
201-383-3262

CONNELLY-GPM, INC.  
SINCE 1876

CHICAGO, IL.  
3154 S. CALIFORNIA  
Ave.  
60608  
312-247-7231

	AUGUST	JULY	AUGUST
Ammonium, syn., anhyd.	1,097,432	1,007,510	1,018,212
Ammonium nitrate	377,198	380,471	378,048
Ammonium nitrate/water solutions	182,226	145,212	140,400
Monammonium phosphates	73,093	40,333	40,333
Other ammonium phosphates	84,710	40,771	40,771
Ammonium sulfate	156,926	155,409	155,409
Diammonium phosphate	714,738	685,480	685,480
Nitric acid	451,601	446,480	446,480
Phosphoric acid	705,764	2,000,551	1,978,000
Sulfuric acid	2,077,120	140,000	140,000
Superphosphate, concentrated	35,443	20,000	20,000
Superphosphate, normal & enriched	1,053,516	20,000	20,000
Superphosphate and other phosphate fertil.	472,505	20,000	20,000



**aceto**  
SPECIALISTS IN FINE CHEMICALS

## Agricultural Chemicals

**aceto** CHEMICAL CO., INC.

126-02 Northern Blvd., Flushing, N.Y. 11388 (718) 898-2300 TWX: 710-582-4900

INTRODUCING  
**VIRTECH.**  
Sodium Bisulfite,  
Sodium Sulfite and  
Sulfur Dioxide.  
**WE'RE #1.**

VIRGINIA  
CHEMICALS  
A Cargill Company  
801 Water St., Dept. 303,  
Portsmouth, VA 23704  
For further information  
call 800-368-2822.

**SODIUM  
PHOSPHATES** OXYCHEM MAKES THE GRADE

For information on our full line of phosphorus products, including sodium phosphates, call Occidental Chemical 1-800-828-1144  
In New York State, 800-462-1166

Occidental Chemical Corporation  
Detergent & Specialty Products Division  
Niagara Falls, NY 14302

## HEAVY CHEMICALS

creases announced throughout September have held.

Stauffer Chemical Company initiated the price increase, raising sulfur dioxide by \$10 per ton, to \$230. Several companies followed. Cominco America Inc. also raised its price, to \$150 per ton, f.o.b. Trail, British Columbia.

"As far as I know, (the increase) has held...I'm not aware of any move to take it off," says one source. Another source claims the increase is "holding very well."

Because of contractual terms, the increase has not yet affected all purchasers. For example, says one source, customers with 30-day price protection were not affected, and won't be until new contracts are written next quarter.

"It's not uncommon for there to be some loose ends to be tied up," notes a source. He adds this is especially common when a product's price has not risen for a long time. Sulfur dioxide's price had last increased in late 1981, according to those surveyed.

## METALS & MINERALS

LEAD — Lead's price continues to increase, because of increased battery production and a general supply shortage.

One producer recently established a price of 27 1/4c. per pound, while another reportedly carries a price between 28 1/4c. and 27c. per pound. One month ago, lead's price was 24 1/4c. per pound, and was as low as 21c. per pound at the end of Summer.

One reason for the shortage, according to a source, has been a strike at Broken Hill, based in Australia. The strike was recently settled, but the source notes the company will take a while to resume full operations. The strike lasted about five months.

Lead stocks on the London Metal Exchange have dropped significantly, the source continues. Current lead stocks total 19,075 metric tons. The total was about 50,000 metric tons in the middle of May.

## Union Carbide

Continued from Page 9

the site, Robert D. Kennedy, president and chief executive officer, said. Related Companies owns, develops, finances, operates, manages or syndicates a total of 320 properties in 213 cities in 36 states.

Union Carbide said it intends to continue to consider further refunding of the

In addition to the financial benefits of the recapitalization, Union Carbide expects that elimination or modification of the restrictive covenants will increase its operating flexibility and permit the corporation to pursue strategic business opportunities.

Initially, the purchase of the securities will be financed with borrowings under a bank credit agreement plus borrowings under a bridge loan being arranged by First Boston and possibly a private placement of senior, unsecured notes. Consumption of the tender offer is subject to obtaining this financing.

The securities to be acquired are all of the 13 1/4 percent senior notes due 1993, the 14 1/4 percent senior notes due 1996 and the 16 percent senior debentures due 2006. Purchase prices, respectively, will be 115 percent, 121 1/4 percent and 133 percent of the principal amount plus accrued interest.

The tender offer is conditioned upon receipt of consents to Carbide's request for elimination or modification of the restrictive covenants and to the tender of at least 90 percent of the outstanding principal amount of the debt securities.

## Chesebrough Sets

Continued from Page 9

are anticipated before the end of the year for the approximately 800 employees who will be affected by sale of the ten plants, Chesebrough-Ponds says.

In commenting on the sale of the Stauffer Seeds business, Mr. Ward indicates that proceeds from the sale of this unit will allow the company to commit more of its resources to agricultural pesticides business.

Chesebrough-Pond's, headquartered in Westport, Conn., is a diversified producer of health products, personal care and beauty products, foods, clothing, and through its Stauffer Chemical Company acquisition last year, chemicals. Worldwide sales in 1985 were approximately \$2.8 billion.

## Airco Forms Division For Retail Operations

BOC Group, Inc., last week announced the formation of a new division, Airco Retail Operations, naming Keith L. Weir as president of the new division.

"Mr. Weir's appointment," says executive vice president Robert E. Lienhard, "reflects our commitment to the retail operations as our desire to increase revenues and profitability in this important line of business

## COATINGS & PLASTICS

Continued from Page 29  
state-of-the-art developments in recycling technology to interested companies.

Wayne Pearson, executive director of the Institute, hopes that recycled plastics markets will grow by as much as 10 percent per year through 1990, partly as a result of the Institute's work.

## PRIME PIGMENTS

TITANIUM DIOXIDE — Producers say that October's price increases have been fully implemented; selling prices for rutile grades now range from 80c. per pound to 84c. per pound, and those for anatase from 77c. per pound to 80c. per pound. Discount prices are at or near list, producers say.

Supply and demand for ores is said to be in balance, but rutile is currently in short supply, and prices have increased to between \$400 and \$500 per ton, on spot basis. Producers are said to be upgrading ilmenite and Canadian slags, which contain less titanium than rutile ores, whenever practical, to use in place of rutile.

New sources of ore are not yet operational, producers say.

Total domestic demand is expected to reach between 930,000 tons and 970,000 tons this year. One producer, placing the figure at 930,000 tons, explains that coatings will capture 50 percent of the total.

## PLASTICS MATERIALS

POLYPROPYLENE — Producers report that October's 2c. and 3c. per pound price hikes are definitely on track so far, and prices are firming across the board, although individual contract terms may be slowing the process in certain market segments. Although current average selling prices do not reflect the full increase, producers expect to see the total amount, contract terms permitting, by the end of the month.

General purpose homopolymer grades currently sell for 30c. per pound to 34c. per pound, while copolymers are priced over 40c. per pound, depending on grade.

Demand has been going strong since early this summer, with a particularly healthy export market pushing overall growth. Through August, export levels rose 28 percent over last year's volumes, while the do-

AMMONIUMBIFLUORIDE  
BARIUMFLUORIDE  
CRYOLITE SYNTH.  
POTASSIUMFLUORIDE  
SODIUMFLUORIDE, USP-QUALITY  
STRONTIUMFLUORIDE  
NOW GIVE US A CALL:  
41 WEST PUTNAM AVE, GREENWICH, CT 06830  
TEL. (203) 869-7900 • Tlx. 475042  
**KALICHEMIE**

## Ammonium Bicarbonate



© 1985 Church & Dwight Co., Inc.

domestic market grew 5 percent, for overall market growth of 9 percent. Preliminary SPI figures for September show overall market growth of 10 percent, with production up almost 12 percent over last year's levels. Producers report that demand for October, based on advanced customer bookings, is showing an even higher growth rate.

Supplies are still tight, with producers using almost all available capacity; the average utilization rate is in the high nineties. Inventories have been drawn down significantly since September, when they stood at 30- to 35-day levels; currently, they stand between 25 and 30 days.

With surging demand, all producers report that they are planning debottlenecking projects. Hilmont USA Inc. has just brought two "Spheripol" process plants onstream in Bayport, Tex. and Lake Charles, La. By the end of this quarter, the company plans to restart idled capacity.

POLYSTYRENE — Other major producers of polystyrene have followed American Petrofina's move to raise prices for the plastic, although they have posted later effective dates.

Two weeks ago, Huntsman Chemical Company announced that it would raise prices for crystal and impact grades by 3c. per pound, and those for pre-colored specialty grades by 2c. per pound.

Last week, Dow Chemical Company, followed with similar price increases also to be effective December 1.

Petrofina's increase was slated for November 1. Given the delayed response by other producers, a spokesman says the firm may have to adjust the effective date to reflect competitive market conditions.

Demand for the polymer has been strong this year. Through August, year-to-date sales and production both rose by over 8 percent above last year's volumes. September demand was even higher, with preliminary figures from SPI showing sales up 9 percent and production up 8 percent over 1985 levels.

Producers describe high capacity utilization rates and low inventory levels.

Although all producers are planning future expansions, nothing definite has yet been announced. Polysar Inc. completed its purchase of Monsanto Company's polystyrene business in late September. The new acquisition will boost its production capacity to 860 million pounds per year, making Polysar one of the 3 leading polystyrene producers in North America.

## PLASTICS ADDITIVES

METALLIC STEARATES — Producers feel that metallic stearate prices may finally start to firm, following recent increases in tallow and stearic acid prices.

So far, tallow prices have moved up 2 1/4c. per pound since July, with stearic acid prices following. Prices for stearates have been depressed this year; from April through July, they fell between 5c. and 6c. per pound.

Overcapacity and competitive discounting are still market norms, producers say; selling prices for some calcium stearates (specifically, those involved in PVC compounding) are currently as low as half the list price.

# ANGUS LISTENS™

Bob Matlock heard you and developed an NP storage system to match your seasonal needs.

He solved the problem by listening. And by responding with a unique plan to provide you with a steady flow of nitroparaffins when you needed it most... during your peak season.

But order management is only his second most important job. His first is listening. For clues that will help us anticipate your needs. For ideas to make our service even more satisfying. In a business

where responsiveness is everything, it's listening that makes the difference. And Angus listens.

**ANGUS®**  
CHEMICAL COMPANY

AC-0005 Call 800/323-6209. In Illinois, call collect at 312/498-6700. © 1985 ANGUS Chemical Company

# ANGUS PERFORMS™

We heard you when you asked for more data on the uses of nitroparaffins and their derivatives.

If you seek new products or improved products, ANGUS' leadership and experience in NPs can be invaluable. So when we heard that many chemists and formulators wanted to know more about the applications of nitroparaffins and their derivatives, we prepared a Product Source Guide.

ANGUS also offers sampling, technical assistance and an unmatched data base. But best of all, ANGUS offers performance. To get your New Source Guide, write: ANGUS Chemical Company, 2211 Sanders Road, Northbrook, IL 60062. Or call.

**ANGUS®**  
CHEMICAL COMPANY

AC-0157 Call 800/323-6209. In Illinois, call collect at 312/498-6700. © 1985 ANGUS Chemical Company

Now available in mixed shipment with Sodium Bicarbonate, Sodium Carbonate Monohydrate, and Con Sal® (Sodium Carbonate Hydrated).

Choose from...

■ Treated (flow agent) and untreated grades, both meeting Food Chemicals Codex.

■ Available in 50 lb. bags or 300 lb. drums.

The only producer in the U.S., we back our Ammonium Bicarbonate by the experience and knowledge gained over a century of bicarbonate specialization. Why compromise? Contact...



Church & Dwight Company, Inc.  
Marketing Department  
Chemicals Division  
P.O. Box CN5297  
Princeton, NJ 08540  
(800) 828-3653  
In NJ—(609) 683-5900 THE POWER OF COMMITMENT AT WORK

## HYDROCHLORIC ACID

Available in food (FCC III) and technical grades. For use in food processing, chemical manufacturing, steel pickling, oil field acidizing, industrial cleaning, and waste treatment.

CALL TOLL FREE  
**(800) 824-3156**  
IN LOUISIANA  
**(504) 379-2287**  
FOR ADDITIONAL  
INFORMATION

BASF Corporation  
Chemicals Division

**BASF**

## AQUA AMMONIA METHYL CHLORIDE SODIUM HYPOCHLORITE

Your dependable suppliers of industrial gases, chlor-alkali products, commercial cleaners and petrochemicals. Product available by cylinder, drum or tank truck. Dedicated delivery fleets, 24 hour availability. Corporate offices: 312/257-9330.

Call for service in your area:

**219/393-5558**

**219/393-3541**

Alexander Chemical Corporation  
Lemont, IL 60439

**Cardinal Chemical Corp.**  
LaPorte, IN 46350

AL-9128

## Hydriodic Acid

### MAJOR PRODUCER FROM STOCK

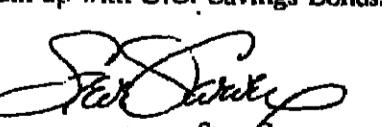
**WHITE** CHEMICAL CORPORATION  
PO BOX 2850 NEWARK, NJ 07114  
TELEPHONE 201-621-4100 TELEX 844131  
OUTSIDE NJ CALL TOLL FREE 1-800-225-4226

"Get a grip on  
your financial  
affairs with  
U.S. Savings  
Bonds."

Talk about making a great comeback—today's Bonds are paying better than ever! Now you get a powerful combination of high market interest rates, a great guaranteed return, and tax-saving advantages.

When you buy Bonds through Payroll Savings at work and where you bank, you're building your savings while strengthening America's economy, too.

Team up with U.S. Savings Bonds. You'll be the winner!

  
Steve Garvey  
First baseman for the National League Champion San Diego Padres

**U.S.  
SAVINGS  
BONDS**  
Paying Better Than Ever

Courtesy of Reel Kastner

## Chemical Finance

### Allied-Signal Declares Dividends

Directors of Allied-Signal Inc., Morris Township, N.J., have declared unchanged dividends of 45 cents per share on the common stock, \$22.8130 on the Series A preferred and \$21.5628 on the Series C preferred.

### British Oxygen Rating Changed by Greenwell

Greenwell Monagu Research, of London and New York, has changed its share purchase recommendation on BOC Group of Great Britain from "Buy" to "Buy or Hold," and has made the same change in its Coalite PLC recommendation. Greenwell's Stuart Wansley, David Ingles and Judy Shaw cited the recovery in the price of BOC's shares. Just prior to the announcement of a merger pact between Celanese Corporation and Hoechst AG, Greenwell reaffirmed its buy recommendation on Hoechst's shares, and Christopher Willis, of E.F. Hutton & Co., issued a buy recommendation on Celanese. Also, Moody's Investor Services upgraded its ratings on Hoechst's securities.

### Damon Corporation Reduces Loss in Fiscal Year

Damon Corporation, Needham Heights, Mass., had a net loss of \$2,618,948 in the fiscal year ended August 31, an improvement over the loss of \$3,227,329 the previous year. Without the impact of its majority-owned subsidiary Damon Biotech, the company would have nearly doubled its earnings to 68 cents per share from 36 cents a year ago.

### Eagle-Picher Adopts 'Poison Pill' Defense

Eagle-Picher Industries, Inc. will distribute common share purchase rights on each outstanding share of its common stock that will permit holders to purchase at the current exercise price shares of a would-be acquirer having twice the value of the exercise price.

### Erbamont's Net Income Rises 12 Percent

Net income of Erbamont NV, the Italian health care group in which Hercules Incorporated holds an interest, raised its net income in the first nine months to 70.9 billion lire from 63.5 billion a year ago. In US dollars, the increase was 45 percent to \$50.8 million, but from \$34.9 million. Net sales totaled 883.9 billion lire, down 7 percent from a year ago, but in dollars, sales were up 21 percent to \$632.8 million.

Erbamont's "Adriamycin" continues as the most widely used anti-cancer drug in the United States and Western Europe.

### Inspiration Acquires Merrill Lynch Leasing

Inspiration Resources Corporation, a New York-based diversified producer of copper and other metals, has completed the purchase of Merrill Lynch Leasing, Inc., which was wholly owned subsidiary of Merrill Lynch & Co., for approximately \$99 million. The acquired company has been re-named Inspiration Leasing Incorporated and will continue to be headquartered in New York. Reuben F. Richards, chairman of Inspiration Resources, said the acquisition provided the company with a foothold in the financial services industry.

### Integrated Genetics Has Its First Profit

Integrated Genetics, Inc., Framingham, Mass., had its first quarterly profit ever in the third quarter, when it earned \$1.7 million, as compared with a loss of \$1.4 million a year earlier. Robert J. Carpenter, president and CEO, said the profit was in large measure due to the company's recently announced joint venture with Amoco Corporation in nucleic acid probe diagnostics.

### Millipore's Outlook Called Upbeat

Millipore Incorporated, a strong competitor in the \$9.5 billion market for analysis and purification, will exceed the industry averages in 1987 with revenue growth of 13 percent, according to PaineWebber Inc. The company's 1986 sales are projected at \$108,461,000, up from \$90,700,000 last year, and net income is put at \$9,132,000, versus last year's \$7,851,000.

PaineWebber's analysts note that Millipore is a multinational company, with 39 percent of its sales in the US, 24 percent in Europe, 14 percent in the Pacific and 11 percent miscellaneous.

### Moore Medical Has Big Gain in Income

Moore Medical Corporation, New Britain, Conn., a national wholesale distributor of brand-name and generic pharmaceuticals and medical and surgical supplies, had third quarter sales of \$49,345,000, up 32 percent from \$47,352,000 a year earlier, and net income of \$1,123,000, an increase of 28 percent from last year.

### Shell Chemical Has Strong Boosts in Profits

Shell Oil Company, Houston, Tex., had chemical segment earnings of \$54 million in the third quarter and \$201 million in the first nine months, up strongly from \$14 million and \$63 million in the comparable 1985 periods, reports John F. Bookout, president of Shell Oil. Total earnings of Shell oil were \$133 million in the quarter, a decrease of \$23 million from a year ago, and \$628 for the nine months, a decrease of \$365 million. The decline reflected the impact of lower oil prices on exploration and production results.

### Ashland to Apply Excess Pension Funds to ESOP

Ashland Oil Inc. will apply excess pension funds to fund a substantial portion of the \$25 million in debt used to establish an employee stock ownership plan. The company also reported the purchase of annuities covering accumulated benefit obligations of most of its pension plans.

### Celanese Raises Sales and Income

Celanese Canada Inc. raised its net income to \$2.3 million in the third quarter on net sales of \$78.4 million from \$1.9 million and \$77.5 million in the same 1985 period. Despite normal seasonal shutdowns in the period, the company's Textile Group continued its strong performance, with both cellulosic and polyester fibers reporting better results than a year ago, the company said.

### Robins Relocates Skadden, Arps as Counsel

A.H. Robins Company will seek reinstatement of the law firm of Skadden, Arps, Slate Meagher & Flom as counsel in its bankruptcy proceedings as a result of the release of Skadden, Arps, by Aetna Life & Casualty from its commitment to Aetna. Aetna is the second largest creditor in the Robins bankruptcy case.

## CHEMICAL IMPORTS

US imports of chemicals and related materials are reported in this section by CPI material. Listings include consignee where possible, container, net weight, name of vessel (in parenthesis), port of origin and date of shipment's arrival in New York or the Port of Newark.

US chemical imports/exports are tabulated monthly in the market reports.

A-B

2 AMINO 5 CHLORO 5 NITROPHENOL 68 dms (16650 lbs) (Ming Peace) Kobe, 10/6.  
2 AMINO 6 METHOXY BENZOTHAZOLE 4 dms (1446 lbs) (Ming Peace) Kobe, 10/6.

ABS RESIN FORMULATION Goldmark Plastic Compound 2720 bgs (15101 lbs) (Ming Peace) Kobe, 10/6.

CARNAUBA WAX Strahl & Pitsch 440 bgs (44484 lbs) (Lloyd Pacifico) Fortaleza, 10/8.

1680 bgs (13533 lbs) (Alison) Fortaleza, 10/11.

CASSEL SODIUM CYANIDE 380 dms (43775 lbs) (Clarendon) Rotterdam, 10/9.

GAMIC ACID DRY Ciba Geigy 160 dms (36055 lbs) (Ming Peace) Hamburg, 10/8.

GELATIN O C L 100 250 bgs (25262 lbs) (Aldebaran) Febus, 10/9.

Corbett Inf 800 bgs (1409 lbs) (Zim New York) Barcelona, 10/8.

Davis Gelatine 580 bgs (38078 lbs) (Cartagena De Indi) Cartagena, 10/8.

GENERIC POLYPHENYLENE SULFIDE PO Celanese 2 (1600 lbs) (Ever Linking) Hamburg, 10/8.

GLYCERINE Magna Kron 1 kg (45922 lbs) (Zaus) Santos, 8/20.

2 AMINO 4 CHLORO 5 NITROPHENOL 68 dms (16650 lbs) (Ming Peace) Kobe, 10/6.

2 AMINO 6 METHOXY BENZOTHAZOLE 4 dms (1446 lbs) (Ming Peace) Kobe, 10/6.

ABS RESIN FORMULATION Goldmark Plastic Compound 2720 bgs (15101 lbs) (Ming Peace) Kobe, 10/6.

CARNAUBA WAX Strahl & Pitsch 440 bgs (44484 lbs) (Lloyd Pacifico) Fortaleza, 10/8.

1680 bgs (13533 lbs) (Alison) Fortaleza, 10/11.

CASSEL SODIUM CYANIDE 380 dms (43775 lbs) (Clarendon) Rotterdam, 10/9.

CASSIA Daarmhouwer 250 bgs (33841 lbs) (Cape Corfu) Padang, 10/8.

CASSIA CORNINI Otto Gerda 214 bgs (33068 lbs) (Alison) Singapore, 10/8.

CASSIA CORNINI Otto Gerda 214 bgs (33068 lbs) (Alison) Singapore, 10/8.

CASSIA Daarmhouwer 400 bgs (55979 lbs) (Cape Corfu) Padang, 10/8.

ALUMINUM ACETYLACETONATE Volmerer Consolida 80 dms (8083 lbs) (Aldebaran) Bremen, 10/9.

KHL Flavors 215 bgs (24308 lbs) (American) Valencia, 10/14.

WILLIAMS Martin 1388 bgs (69334 lbs) (Freedom) Mar del Plata, 10/6.

168 bgs (24218 lbs) (Sea Land Pioneer) Algeciras, 10/8.

CASSIA Daarmhouwer 400 bgs (55979 lbs) (Cape Corfu) Padang, 10/8.

Louis Funk 170 bgs (22421 lbs) (Cape Corfu) Padang, 10/9.

Ludwig Mueller 410 bgs (56240 lbs) (Cape Corfu) Padang, 10/8.

U S Lines 240 bgs (33089 lbs) (American) Washington, 10/8.

CASSIA CORNINI Otto Gerda 214 bgs (33068 lbs) (Alison) Singapore, 10/8.

CASSIA CORNINI Otto Gerda 214 bgs (33068 lbs) (Alison) Singapore, 10/8.

CASSIA Daarmhouwer 400 bgs (55979 lbs) (Cape Corfu) Padang, 10/8.

WILLIAMS Martin 1388 bgs (69334 lbs) (Freedom) Mar del Plata, 10/6.

168 bgs (24218 lbs) (Sea Land Pioneer) Algeciras, 10/8.

MONOSODIUM GLUTAMATE Fine CRYSTA MLM Express 720 bgs (42084 lbs) (Verazano Bridge) Bremen, 10/8.

MONOCHLORACETIC ACID FLAKES 1188 bgs (134280 lbs) (Ming Peace) Antwerp, 10/8.

MONOCHLORACETIC ACID FLAKES 4 dms (2424 lbs) (Ming Peace) Yokohama, 10/8.

MONOFENYLARYTHRITOL Recachem 1400 bgs (79882 lbs) (Alcongas) Valparaiso, 10/4.

MONOGLUTAMIC ACID 800 crt (277780 lbs) (Nurnberg Express) Antwerp, 10/8.

MONOGLUTAMIC ACID 800 crt (277780 lbs) (Nurnberg Express) Antwerp, 10/8.

MONOGLUTAMIC ACID 800 crt (277780 lbs) (Nurnberg Express) Antwerp, 10/8.

MONOGLUTAMIC ACID 800 crt (277780 lbs) (Nurnberg Express) Antwerp, 10/8.

MONOGLUTAMIC ACID 800 crt (277780 lbs) (Nurnberg Express) Antwerp, 10/8.

MONOGLUTAMIC ACID 800 crt (277780 lbs) (Nurnberg Express) Antwerp, 10/8.

MONOGLUTAMIC ACID 800 crt (277780 lbs) (Nurnberg Express) Antwerp, 10/8.

MONOGLUTAMIC ACID 800 crt (277780 lbs) (Nurnberg Express) Antwerp, 10/8.

MONOGLUTAMIC ACID 800 crt (277780 lbs) (Nurnberg Express) Antwerp, 10/8.

MONOGLUTAMIC ACID 800 crt (277780 lbs) (Nurnberg Express) Antwerp, 10/8.

MONOGLUTAMIC ACID 800 crt (277780 lbs) (Nurnberg Express) Antwerp, 10/8.

MONOGLUTAMIC ACID 800 crt (277780 lbs) (Nurnberg Express) Antwerp, 10/8.

MONOGLUTAMIC ACID 800 crt (277780 lbs) (Nurnberg Express) Antwerp, 10/8.

MONOGLUTAMIC ACID 800 crt (277780 lbs) (Nurnberg Express) Antwerp, 10/8.

MONOGLUTAMIC ACID 800 crt (277780 lbs) (Nurnberg Express) Antwerp, 10/8.

MONOGLUTAMIC ACID 800 crt (277780 lbs) (Nurnberg Express) Antwerp, 10/8.

MONOGLUTAMIC ACID 800 crt (277780 lbs) (Nurnberg Express) Antwerp, 10/8.

# **CHEMICAL PRICES**

WEEK ENDING NOV 7, 1986

This chemical prices section contains spot quotations and/or list prices of suppliers of chemicals and related materials on a New York or other indicated basis. The listings are based on price information obtained from suppliers. Note that posted prices do not necessarily represent levels at which transactions actually may have occurred. They do not represent bid and asked prices, nor a range of prices over the week. Price ranges may represent quotations of different suppliers as well as differences in quantity, quality and location. All matters under this heading are fully covered by copyright.

**An Index of weekly chemical market reports is on the back cover.**

A

ables diba, dms.	.kilo	25.00	27.00
cocetaldehyde, 99%, tanks, f.t. std. lb.	.37	-	Prices 1c. higher in West.
Acetaminophen (see N-Acetyl-p-aminophenol)			
Cocotanilide, tech., baked, bgs., t.i., f.o.b. works.	lb.	1.29	-
Acetic acid, tech., tanks, divd. E	lb.	.25	-
Acetic anhydride, tanks, divd. E	lb.	.43%	-
Acetic anhydride prices 1c. higher in West.			
Cocotaneacetanilide, dms., t.i., divd.	lb.	1.29	-
Cocotacet-o-anisidide, dms., t.i., divd.	lb.	2.70	-
Cocotacet-o-chloranilide, dms., t.i., divd.	lb.	2.85	-
Cocotacet-o-toluclidide, dms., t.i., divd.	lb.	1.58	-
Cocotacet-m-xylidide, dms., t.i., divd.	lb.	3.33	-
Acetone, tanks, divd. E.	lb.	.25	-
divd. Zone 2 (Calif.)	lb.	.27	-
divd. Zone 3 (W. of Rockies excluding Calif.)	lb.	.27	-
Acetonitrile, tanks, f.t. std.	lb.	.53	.54½
Cocophenonetin (see Phenacetin).			
Acetophenone, tech., tanks, f.o.b. works.	lb.	.76	.85
perfume grade, extra, cans.	lb.	2.15	-
N-Acetyl-p-aminophenol, c.i., t.i. works.	lb.	5.95	6.84
Acetylene black, imp., 50% compressed, 12½-lb. bgs. o.i., t.i. f.t. extra.	lb.	.96	-
100%, 25-lb. bgs., same basis	lb.	.95%	-
Acetylene tetrabromide, tank, f.o.b. works.	lb.	.97	-
Acetylbenzoic acid, USP (see Aspirin).			
Acetyltributyl citrate, bulk, f.o.b. works.	lb.	1.28	-
Acetyltriethyl citrate, bulk, f.o.b. works.	lb.	2.08	-
Acrolein, tech. tanks, works.	lb.	.62	-
Acrylamide, sold, t.i. works.	lb.	1.00	-
soln., 100% basis tanks, works. lb.	lb.	.74	.77
Acrylic acid, glacial, reg. tanks, divd.	lb.	.87	-
tech. tanks, f.t. std.	lb.	.60	-
Acrylonitrile, tanks, works.	lb.	.39½	.46½
Acrylonitrile-butadiene-styrene resin, high-impact nat., t.i., dms., divd.	lb.	1.09	1.12
medium-impact nat., same basis lb.	lb.	1.05	1.08
low-impact nat., same basis lb.	lb.	.98	1.01
100-lb. bgs., same basis	ton	224.00	
Aluminum acetate, basic, dms., t.i., works.	lb.	3.25	-
Aluminum chloride, anhyd., soln., 500-600 lb. dms., o.i., t.i., works. f.t. equald.	lb.	.53	-
bulk, same basis	lb.	.48	-
semi-bulk bins, same basis	lb.	.52	-
Aluminum chloride, coml., soln., 32° tanks, works.	lb.	15.00	-
ret. dms., o.i. works	lb.	12.00	-
non-ret. dms., same basis	lb.	20.00	-
Aluminum formate, dibasic, Ig. 8% Al <sub>2</sub> O <sub>3</sub> , t.i. works.	lb.	.55	-
Aluminum hydrate (see Alumina, hydrated)			
Aluminum hydroxide, dried, gel, NF, 75-lb. dms., c.i., t.i. works. lb.	lb.	2.76	3.50
Aluminummethyl, 99%+ or more, 50-lb. pipe., 30,000-lb. lots, f.t. std.	lb.	.76	-
Aluminum oxide amorphous (see Alumina, calcined).			
Aluminum paste, leafing grade, std., lining, 2,400 lb. lots, divd.	lb.	1.40	-
lining, extra-fine, same basis	lb.	1.99	2.14
Aluminum phenolsulfonate, purif., 100-kilo dms., t.i.	kilo	6.46	-
Aluminum powder, leafing grade, std. lining, 2,400 lb. lots, divd.	lb.	3.17	-
extra fine, lining, same basis	lb.	4.04	-
Aluminum stearate, bgs., c.i., t.i. works.	lb.	1.25	1.38
Aluminum sulfate, coml., grd., 100 lb. bgs., c.i. works, f.t. equald., basis 17% Al <sub>2</sub> O <sub>3</sub> East and Gulf Coast	ton	205.00	-
West Coast	ton	220.80	-
Iq., tanks, N.E. same basis	ton	145.00	-
Iron-free, dry, bgs., c.i. same basis	ton	300.00	-
Iq., tanks, same basis	ton	225.00	285.00
Aluminum sulfate, USP, gran., dms. lb., t.o.b. works.	lb.	.337	
Aminoacetic acid, USP, dms., 20,000 lbs., t.o.b. works.	lb.	2.12	-
tech., t.i. same basis	lb.	1.68	-
p-Aminobenzal acid, 1,000 kilos or more, dms., f.o.b. works. kilo	lb.	9.60	10.10
2-Amino-4-chlorophenol dry and grd., 14,000 lbs. or more, f.t. std. lb.	lb.	5.79	-
Aminothio ethanolamine, tanks, f.t. collect.	lb.	1.33½	-
N-Aminothiopiperazine, tanks, f.o.b. f.t. collect.	lb.	1.05	-
2-Amino-2-ethyl-1,3-propanediol dms., t.i. f.o.b. works.	lb.	1.82	-
c.i., t.i. works, f.t. equald. lb.	1.78	-	
Ammonium heptamolybdate, cryst., dms., 24,000 lbs. t.o.b. works.	lb.	5.57	-
Ammonium lauryl sulfate, tanks, f.o.b. works.	lb.	.29	.32
Ammonium lignin, sulfonate, bulk, f.o.b. Hoquiam, Ore. .ton	72.00	-	
Ammonium nitrate, dom. fertilizer grade, 33.5% N, bulk, S.E. divd.	ton	130.00	135.00
Ammonium oxalate, tech., fine, gran. 300-lb. dms., t.i., f.o.b. works.	lb.	1.42	1.68
Ammonium pentaborate gran. bgs., c.i., works.	lb.	.75	-
Ammonium pentaborate powder 20c. per lb. higher.			
Ammonium persulfate, 226-lb. dms., 24,000 lbs. or more, f.o.b. works.	lb.	.58	-
55-lb. bgs., same basis	lb.	.56½	-
Ammonium phosphate (see Di- and monoammonium phosphates).			
Ammonium silicofluoride, dms. c.i., t.i. works.	lb.	.30%	-
Ammonium sulfate, Ig. gran., bulk, c.i., works.	ton	80.00	90.00
std., coml., bulk, f.o.b. works	ton	80.00	70.00
tch., bgs., c.i., t.i. works	ton	108.00	120.00
Ammonium sulfide, liq., 40-44% tanks, 100% basis, f.t. equald. ton.	460.00	-	
Ammonium sulfocyanide, tech. (see Ammonium thiocyanate).			
Ammonium thiocyanate, tech., cryst., bgs., c.i. works.	lb.	1.02	-
tech. soh., 50%, tanks, f.t. equald.	lb.	.93	-
Ammonium thiosulfate, photographic, 80%, tanks, f.o.b. works	lb.	.13	-
Ammonium zirconyl carbonate, soln. bulk.	lb.	.72	-
Amyl acetate, primary mixed isomers, tanks, divd.	lb.	.57	-
Amyl alcohol, primary mixed isomers, tanks, f.t. std.	lb.	.48½	-
Amyl cinnamaldehyde, dms.	lb.	2.35	2.50
p-tert-Amylphenol, bulk, works.	lb.	.91	1.03
Amrys oil, dms.	lb.	11.00	-
Anethole, tech., dms.	lb.	10.20	-
USP, dms.	lb.	3.65	4.80
Anise oil, bogs.	lb.	700.00	-
Aniline, tanks, f.o.b.	lb.	.39	.36½
Anise oil, dms.	lb.	8.90	-
Bacitracin, USP, non-sterile, one billion units or more . . . million units	6.30	6.60	
Barbital, NF, 60-kilo dms., divd.	ton	22.80	-
Barbital-sodium, NF, 50-kilo dms. divd.	ton	23.00	-
Barite, dry-grd., Southern, off-color, coarse, bgs., c.i., f.o.b. mines lb. water-grd., white, bgs., c.i., f.o.b. works.	lb.	.09	11
unbleached, extra-fine, pigment grade, c.i., f.o.b. works	ton	160.00	-
Barium carbonate, precip., bulk, c.i. works, f.t. equald.	lb.	.25	-
bgs., same basis.	lb.	.25%	-
photo grade, bgs., same basis ton	510.00	-	
Barium chlorate, 100-lb. dms. 1-10 dim. lots, works.	lb.	1.04	-
Barkum chloride, tech., cryst., bgs., c.i. works.	ton	470.00	-
anhyd. drums c.i. same basis ton	590.00	-	
Barium chloride, purif., cryst. 400-lb. dms., works.	lb.	3.78	-
Barium monohydrate, 55-lb. bgs., dms., t.i. f.o.b. works.	ton	46.00	-
octahydrate, cryst., bgs., same basis.	ton	33.00	-
Barium nitrate, 100-lb. bgs., t.i. works.	ton	32.50	-
10% starch granulation, white, 250-lb. d.m. c.i., f.o.b.	lb.	1.97	-
16% starch granulation, white, same basis	lb.	2.00	-
Freight equald. shpt. identical quantity over standard roads from N.Y., Phila., Midland, Mich., Chicago and St. Louis.			
Atropine sulfate, USP, bots.	oz.	10.00	11.00
Avocado oil, dms.	lb.	4.00	4.50
Azeitic acid, tech., 50-lb. bgs., t.i., c.i., divd.	lb.	1.23	-
Azo orange, bogs., divd.	lb.	4.80	-
Azo yellow, 10 G, bgs., divd. E. of Rockies	lb.	4.40	-
AzoGlyellow pigment, bgs., same basis	lb.	2.45	-

# **ABBREVIATIONS**

## THE TERMINOLOGY OF THE CHEMICAL MARKETPLACE

<i>alpha</i>					
<i>allow</i> /allowed	C./Centigrade	E./East	Incl./Included	o-/ortho	secs./seconds
<i>amorph./amorphous</i>	chys./carboys	e.p./end point	indust./industrial	ord./ordinary	sp.g./specific gravity
<i>MP/American melting</i>	c.c./cubic centimeters	squid./squidized	kgs./kgs	oz./ounce	ship./shipment
<i>point</i>	CD/completely den-	exp./expressed	l-/-sevo	P/phosphorus	solt./solution
<i>hyd./anhydrous</i>	atured	extr./extracted	lb./pound	p-/para	std./standard
<i>OAC/Association of</i>	c.i./cost insurance	F./Fahrenheit	lb./pound	Pac./Pacific	syn./synthetic
<i>Official Agricultural</i>	freight	f.a.s./free alongside	l.c.i./less carload	pt./proof	tanks/railroad tankcar
<i>Chemists</i>	c.i./carload	ferment./fermentation	l.t.l./less truckload	phos./phosphate	tach./technical
<i>p.s./available phos-</i>	cns./cans	f.f.a./free fatty acid	liq./liquid	photo/photographic	teri./territory
<i>photo acid</i>	com./commercial	f.f.c./free from chlorine	m-/meta	pkgs./packages	tl./truckload
<i>approx./approximately</i>	conc./concentrated	f.f.p.a./free from prus-	m.a.p./mixed aniline	powd./powdered	ton/refer to short ton
<i>irid./artificial</i>	cp./chemically pure	sic solid	point	precip./precipitated	of 2,000 pounds
<i>ASTM/American Soci-</i>	cps./centipoises	fib./fiber	meg./microgram	prod./producer	TVA/temporary vari-
<i>ety for Testing &amp;</i>	cryst./crystalline	f.o.b./free on board	mfr./manufacturers	pt./point	ary allowance
<i>Materials</i>	cs./cases	f.p./freezing point	min./minimum	puv./puverized	t.w./tankwagons
	cins./cartons	frt./freight	molten	purif./purified	U.S./United States
	cyl./cylinders	g-/gamma	m.p./melting point	redist./redistilled	Pharmacopeia
	d-/dextro	gal./gallon	N/nitrogen	refd./refined	
	dbl./double	g.p./general purpose	n-/normal	refy./refinery	via./viscosity
	denat./denatured	gran./granular	nat./natural	resub./resublimed	V.M.P./varnish makers
	dest.-dist./destruct-	grd./ground	neut./neutral	ret./returnable	& painters
	ively distilled	Lb.p./initial boiling	NF/National Formulary	SD/specially denatured	
	dL/dextro-/-sevo	dist./distilled	No./number	s.d./single distilled	W/West
	dist./distilled	dist./distributor	Norm./nominal	SE/Southeast	w.h./whitehouse
	dvrd./delivered	Imp./imported		sec./secondary	w.w./water-white
	drms./drums				
	drum./domestic				
	drums./drums				
	excs./boxes				
	box./box				
	b.r./boiling range				
	boxe./boxes				
	boxx./box				

**NOTE:** A unit-ton is 1 percent of 2,000 pounds of the basic constituent or other standard of the material. The percentage figure of the basic constituent multiplied by the unit-ton price shown in Chemical Materials Reporting gives the value of one ton.

# **CHEMICAL PRICES**

**WEEK ENDING NOV 7, 1986**

Carbon Black, low structure, bulk, c.i. works.	lb.	.240	.280
bags, c.i. works.	lb.	.270	.290
Intermediate-super-abrasion (ISAF).	lb.	.25	-
bgs., c.i. works.	lb.	.28	-
super-abrasion (SAF), bulk, c.i., works.	lb.	.31	-
bgs., c.i., works.	lb.	.4050	-
semi-reinforcing (SRF), bulk, c.i., works.	lb.	.210	-
bgs., c.i., works.	lb.	.240	-
Carbon black, thermal, medium, bgs. c.i. works.	lb.	.30	.30½
bulk, c.i. works.	lb.	.32	.34½
Carbon black oil, barge, f.o.b. Gulf refineries	bbls.	10.50	12.50
f.o.b. W. coast refineries	bbls.	10.50	12.50
Carbon disulfide, t.c., f.o.b. works ton	420.00	-	
Carbon tetrachloride, CP, consumers, dms., c.i., ft. alid.	lb.	.36	-
tech., dms., c.i., t.i., ft. alid.	lb.	.31	-
tank transport (min. 4,000 gals.) ft. alid.	lb.	.24	-
Carboxymethyl cellulose (see CMC).			
Cardamom oil, NF, bogs.	lb.	80.00	-
Cardamoms, decor, Guatemalan, green, Guatemalan, bogs.	lb.	3.00	-
Carmine, No. 40, NF, bulk, 100-lb. lots or more, divd.	lb.	6.25	9.75
Carnauba wax, Paranaiba, No. 1, yellow, bogs., ton lots.	lb.	135.00	140.00
Gears, No. 1, yellow, bogs., ton lots.	lb.	1.85	2.05
North Country, No. 2, refined, bogs., ton lots.	lb.	1.75	1.90
Carnauba wax, North Country No. 3, centrifuged, bogs., ton lots.	lb.	1.10	-
North Country, No. 3, refined, bogs., ton lots.	lb.	1.30	1.45
Powdered carnauba wax, 20 to 100 mesh, 20c. per lb., higher.			
b-Carotene, in vegetable oil, semi-solid suspension, 400,000 A units per gram, .33 lbs. or more.	lb.	32.75	-
b-Carotene, 1lb. in vegetable oil, 500,000 A units per gram, .33 lbs. or more.	lb.	40.75	-
b-Carotene, dry, beads, 10%, 187,000 A units per gram 50-lb. cans.	lb.	26.85	-
d-Carvone, 25-lb. dms., syn.	lb.	48.00	-
l-Carvone.	lb.	7.00	7.25
Cascara sagrada bark, bulk.	lb.	1.00	-
Caselin, Imp., acid-precip., grd., 30-mesh, Australian, edible, same basis, c.i.f.	lb.	1.45	-
Australian, Indust., same basis, c.i.f.	lb.	1.385	-
Cassia acid, 303 mol. wt., dms., fr. acid, 100% basis.	lb.	3.70	-
Cassis, Konijnij "A" bogs.	lb.	1.05	1.10
"B" bogs.	lb.	.88	.95
Cassia oil, Chinese, dms.	lb.	18.50	-
Castor oil, raw, No. 1, Braz. tanks.	lb.	.31	.33
USP 5-8 dms.	lb.	.74	-
refd. doct., 5-8 dms.	lb.	.78	-
blown, 5-8 dms.	lb.	.76	-
dehydrated, bodied, tanks.	lb.	.74	-
dehydrated, unbodied, tanks.	lb.	.68	-
Castor oil, acids dehydrated, dms.	lb.	1.10	-
ricinoleic acid.	lb.	.79½	.83
Castor pomace, bogs., container load, f.o.b., Miami, Fla.	ton	154.00	-
Castorum, nat., cans.	lb.	18.00	35.00
syn. cans.	lb.	11.00	-
Catechol, CP, 45-kilo dms., 50-239 dms., f.o.b., t.i., same basis.	kilo	7.83	-
tech., bogs., t.i., same basis.	kilo	3.71	-
Causitio potash (see Potash, caustic).			
Causitio soda (see Soda, caustic).			
Cedarleaf oil, dms.	lb.	17.50	-
Cedarwood oil, Texas, dms., cans.	lb.	1.78	2.50
Virginia.	lb.	4.76	-
Cedrol, prime dms.	lb.	5.25	-
Cetyl acetate, dist., dms..	lb.	4.25	5.30
Celery seed, Indian, bogs.	lb.	.48	-
Celery seed oil.	lb.	87.00	-
Cellulose acetate, powd., bogs., t.i., divd. E.	lb.	1.30	-
Cellulose acetate butyrate, powd., 17% butyryl content, bogs., t.i., divd. E.	lb.	1.75	-
38% butyryl content, bogs., divd. E.	lb.	1.69	-
50% butyryl content, bogs., divd. E.	lb.	1.61	-
55% butyryl content, bogs., divd. E.	lb.	1.63	-
Cellulose gum, pure, high vis., bogs., 24,000-lb. lots or more works, f.o.b. Hopewell, Va.	lb.	1.80	1.70
std., low or medium vis., bogs., c.i., t.i., f.o.b. Hopewell, Va.	lb.	1.80	1.90
Cerium concentrate CeO <sub>2</sub> , 50 lbs., b.	lb.	1.35	-
Cerium hydroxide 80% CeO <sub>2</sub> , dms., works.	lb.	5.40	-
.77% CeO <sub>2</sub> , dms., works.	lb.	4.20	1.50
Cerium oxide, optical grade, bogs., 50-lb. lots or more, divd.	lb.	1.85	1.90
Cetyl alcohol, NF, one, c.i., t.i., divd. E. b.	lb.	.68½	1.27
Chalk (see Calcium carbonate).			
Chamomile flowers, Hungarian, c.i.	lb.	4.25	4.50
Roman, c.i.	lb.	4.94	-
Egyptian, whole.	lb.	2.70	3.00
Chamomile oil, blue, Egyptian, blue, Hungarian.	lb.	545.00	-
Chamomile oil, blue, Egyptian, blue, Hungarian.	lb.	370.00	-
Chenopodium oil, NF, cans.	lb.	15.00	-
Chicago acid, dry, bogs., ft. alid.	lb.	13.50	-
Chiles (see Pepper, red).			
Chlorendic anhydride, tech., dms., t.i., works.	lb.	1.50	-
Chlorinated paraffin, 40% chlorine, bulk, divd., Zone 1.	lb.	.45	.61½
50% chlorine, same basis.	lb.	.46	.71½
60% chlorine, same basis.	lb.	.46	.88½

# CHEMICAL PRICES

WEEK ENDING NOV 7, 1986

Chlorinated paraffin, Zone 2 prices are 1c. per lb. higher and Zone 3 prices are 2c. per lb. higher and t.l. drum prices are 5c. per lb. higher.

Chlorinated rubber, 5, 10, 20 cps, bgs., t.l., divd. .... 1.88 -

40 cps, bgs., t.l., divd. .... 1.88 -

125 cps, bgs., t.l., divd. .... 2.80 -

300 cps, bgs., t.l., divd. .... 2.75 -

Chlorinated tanins single units works, f.o.b., frt. equiv. .... 195.00 200.00

Chloroacetic acid, mono, high purity, flake, 58% bulk f.o.b. works. .... .58 -

2-Chloro-4-aminotoluene, tech., id., dms., t.l., t.f. works. .... 1.88 -

o-Chlorotoluene liquid, dms., t.l., t.f. works. .... 1.83 -

tanks, same basis. .... 1.55 -

p-Chlorotoluene, idem, o.l., t.l., t.f. works. .... 1.70 -

flakes, dms., c.l., same basis. .... 2.00 -

o-Chlorobenzaldehyde, dms., t.l., t.f. works. .... 2.45 -

p-Chlorobenzaldehyde, dms., 4.000. .... 3.84 3.85

lids or more, bgs., t.l., t.f. .... 3.90 -

p-Chlorobenzoic acid, dms., 500-lb. lots or more, works. .... 1.68 2.25

Chromform, tech, tanks, divd., t.l., t.f. consumers, tanks, divd. .... 3.41 -

NF tanks, min., consume, 4,000. gals. .... 3.41 -

Cobalt acetate, NF cans, 26-100. .... .351 -

2-Chloro-4-nitrophenyl, paste, com. quality, basis, dms., t.l., t.f. .... 1.83 -

lids or more, bgs., t.l., t.f. .... 3.08 -

powd., same basis. .... 3.15 -

4-Chloro-2-nitrophenyl, paste, 172.5 mol. wt., commodity basis, dms., t.l., t.f. .... 2.25 -

powd., same basis. .... 2.70 -

o-Chlorophenol, dms., c.l., frt. equiv. .... 2.00 2.40

p-Chlorophenol, dms., c.l., frt. equiv. .... 1.25 1.70

Chloropicrin, 1,500-lb. cyls., t.l., t.f. works. .... 1.25 -

Chlorosulfonic acid, tanks, t.f. equiv. .... 1.18 -

p-Chlorotoluene, tech., tanks, t.f. equiv. .... 1.00 -

Choicecast, 1,000,000 units per gram, kilobags, .... 24.00 -

Choline bitartrate, cryst., 88%-min. 500-kilo dms., f.o.b. Springfield, Mo. .... 6.90 -

Choline chloride, 70% aqueous, t.c., t.l., divd. E. Rocoids, .... .28 -

Choline chloride, 80% supplement, bulk hoppercars. .... .39 -

bgs., 50,000-lb. min. .... .40 -

Choline chloride, pharmaceutical, 50 kilo lots, f.o.b. Springfield, Mo. .... 6.00 -

Choline hydrogen citrate, 98% min. 500-lb. lots, f.o.b. Springfield, Mo. .... 6.00 -

Chrome green, CP extract, 100g. .... 1.88 -

light, bgs., same basis. .... 1.70 -

medium, bgs., same basis. .... 1.72 -

extra dry, CP, same basis. .... 1.74 -

Chrome orange, CP, bgs., divd. E. of Rockies, .... .83 .89

Chrome yellow, CP, base, E. of Rockies, .... 1.09 1.18

Chromic acid, 93%, flask dms., c.l., frt. equiv. .... 1.18 -

gld., same basis. .... 1.25 -

Chromium acetate, soin, 71% dms., 500-lb. lots, works. .... .10 -

Chromium fluoride, dms., t.l., t.f. works. .... .81 -

Chromium nitrate, dms., t.l., t.f. .... 1.45 -

10% metal min., 500-lb. dms., same basis. .... .74 .86

Chromium oxide, hydrated, 50-lb. bags, c.l. .... 5.50 -

Cinnamaldehyde, dms., 2.00 -

Cinnamaldehyde, 25-lb. cyls. .... 1.85 2.46

Cinnamaldehyde, 4.50 -

Cinnamaldehyde, 1.00 -

Cinnamaldehyde, 2.75 10.00

Cinnamaldehyde, dms., 1.75 -

Cinnamaldehyde, 5.50 6.50

Cinnamyl formate, 25-lb. cans. .... .85 -

Civet, artif. bats. .... 2.00 -

nat. .... 400.00 -

Clay bent. dom. ex heated, bgs., t.l., t.f. .... 49.00 -

dom. crushed, incalite-repair, bgs., t.l., t.f. .... 24.00 -

Clay China (see Keck). .... 1.40 -

Glove leaf of Indonesian, reg. dms., 3.13 -

Macassar, reg. .... .50 -

Glove oil, .... 28.00 27.00

Gloves, Brazil. .... 2.35 2.40

Zanzibar. .... 4.20 -

Madagascar. .... 2.35 2.40

Cleaners, naphtha, 140# flash tanks, New Jersey or New York, divd. .... 1.40 -

Detergent makers, f.o.b. manufac. point. .... .64 -

CMC, purf., highv. (see Cellulose gum). .... 250.00 265.00

Coalter pitch, indust., t.l., works. .... 1.45 -

Cobalt acetate, dms., t.l., t.f. .... 3.81 4.25

Cobalt carbonate, Powd., dms., t.f. .... 6.81 8.16

Cobalt chloride, 5,000 lbs. or more, t.f. .... 4.15 -

Cobalt hydrate, dms., t.l., t.f. .... 8.20 10.65

Cobalt metal, 99.5-99.9%, 250-kil. dms., t.l., N.Y. Chicago. .... .85 -

Cobalt naphthalate, dms., t.l., t.f. .... 1.70 -

Cobalt naphthalate, dms., t.l., t.f. .... 2.05 -

Cobalt nitrate, dms., t.l., t.f. .... 2.74 3.45

Cobalt sulfate, 100,000 lbs., t.l., t.f. .... 2.00 -

Cobalt sulfate imp., 70-71% Co. .... 9.51 -

Cobalt oxide imp., 99.7-1%. .... 9.78 -

Cobalt oxide imp., 99.9-100%. .... 9.825 .9925

Cyclohexane, bkg., barrels, t.l., t.f. .... 7.85 -

90%-92%, dms., t.l., t.f. .... 7.85 -

Cyclohexane, bkg., barrels, t.l., t.f. .... 5.2 6.89

Cyclohexane tech., tanks, t.l., t.f. .... .52 -

Cyclohexane tech., tanks, t.l., t.f. .... .55% .58%

Cyclohexane tech., tanks, t.l., t.f. .... .55 -

# CHEMICAL PRICES

WEEK ENDING NOV 7, 1986

Hydrochloric acid, 20° Ba, tanks, works, East ..... ton 55.00 65.00 Midwest ..... ton 50.00 70.00 Gulf Coast ..... ton 57.00 West Coast ..... ton 90.00 105.00 22<sup>nd</sup> acid, same basis, East ..... ton 68.00 70.00 Midwest ..... ton 69.00 70.00 Gulf Coast ..... ton 63.50 West Coast ..... ton 100.00 115.00

NOTE: Prices vary and are either freight collect or freight equalized depending on producer or location.

Hydrocodone acetate, micronized, dms, 25 lbs or more, gran. .... .70 -

Hydrocortisone, 25% alcot, micronized, dms, 25 lbs or more, gran. .... .70 -

Hydrofluorocarbon, (see Hydrofluorocarbons)

Lanolin, f.o.b., frt. .... .70 -

Leucotriacyl, 100bs, 43.00 -

Hydrofluoropropyl acid, 15-gal. dms, t.i. .... .70 -

tanks, 100% basic, works, ton 180.00 210.00

Hydrogen bromide, anhyd, cyle, extra, 30-lb. cans, f.o.b. works, ib. .... 7.00 -

Hydrogen bromide, anhyd, 50-lb. cyle, f.o.b. works, ib. .... .85 -

800-lb. cyle, anhyd, .... .85 -

Hydrogen chloride, anhyd, tube trailers, seller's trailer, min. 100,000 lbs, a/cars, ib. .... .37 -

tube trailers, buyer's trailer, .... ib. .... .27 -

Hydrogen chloride, anhyd, tanks, works, .... ib. .... .50 -

Hydrogen cyanide, 98.5%, tanks, works, .... ib. .... 270.00 -

Hydrogen fluoride, anhyd, tank cars, c.t.o.b., f.o.b. .... ib. .... .6875 -

Hydrogen peroxide, 35% tech, tanks, works, f.a. equal. .... ib. .... 2325 -

50% tencarc, f.t. equal. .... ib. .... 3225 -

70% tencarc, f.t. equal. .... ib. .... 45 -

Hydrogen sulfide, 99.25% min., seller's tanks, works, ib. .... .12 -

170-lb. cylinders, .... ib. .... 2.27 -

Hydroquinone, photo grade, consum. art., f.o.b. .... ib. .... 2.54 -

tech, dms, f.d. .... ib. .... 1.85 -

Hydroquinone, 100% pure, .... ib. .... .491/2 -

Hydroquinone, 100% pure, .... ib. .... .83 -

p-Hydroxybenzoic sulfonic acid (see p-Phenoxybenzoic acid).

Hydroxybutyl methylcellulose (visc. 12,000 cps) 50-lb. bags, U.S. .... ib. .... 30.00 lb. min., dms, zone 1, .... ib. .... 2.10 -

Hydroxyethyl cellulose dimethyl acetate, .... ib. .... 18.55 -

p-Hydroxybenzylamine, dms, t.i. .... ib. .... 4.10 -

Hydroxymethyl, natural, dms, .... ib. .... 8.40 -

pure, dms, .... ib. .... 13.80 -

extra-grade, dms, .... ib. .... 14.80 -

syn, dms, .... ib. .... 9.50 -

Hydroxymethyl cellulose, t.i. .... ib. .... 2.07 2.12

Hydroxymethyl methacrylate (visc. 3.5 to 4.5 cps) 50 lb. bags, 30,000 min., dms, zone 1, .... ib. .... 2.73 -

Hydroxymethyl methacrylates, premium, U.S.P. (visc. 4,000 through 15,000), 50 lb. bags, t.i. .... ib. .... 1.00 -

100-lb. bags, 11.1, 30,000 min., dms, zone 1, .... ib. .... 2.17 -

Hydroxymethyl methacrylates (visc. 100 open 50 lb. bags, 11.1, 30,000 min., dms, zone 1, .... ib. .... 2.84 -

8-hydroxyquinaline (see Quinoline)

Hypophosphorous acid, purif., 50% dms, t.i. .... ib. .... 3.15 -

# J

J acid, paste, dms, works, 100% basic, .... ib. .... 4.75 -

Japan wax, cs. .... ib. .... 6.60 5.80

Jobe oil, 55-gal. dms, f.o.b. Atlanta, producing point, .... gal. .... 30.00 40.00

Juniperberry oil, Italian, .... kg. .... 120.00 -

K

Kaolin, water washed, fully cleaned, bags, c.t.o.b. Georgia, .... ton 255.00 -

NF prod, colloidial, bactericid, .... ton 255.00 -

trated, 50-lb. bags, 5,000 lb., .... ib. .... .24 -

Kaolin, uncleaned, No. 1 coating bulk, .... ton 94.00 -

No. 2 coating, .... ton 75.00 -

No. 3 coating, .... ton 73.00 -

No. 4 coating, .... ton 70.00 -

filler, gen'l purpose, same basis, .... ton 58.00 -

delaminated water washed, uncalcd paint film 1 micron avg. same basis, .... ton 162.00 -

dry-ground, partially soft, same basis, .... ton 60.00 -

Kareya gun, No. 1, pound, bbs, .... ib. .... 2.25 -

No. 2, pound, bbs, .... ib. .... 1.85 -

Kola nuts, bgs, .... ib. .... .52 -

L

Ichthammol, NF, 200-lb. dms, .... ib. .... 4.25 4.50

Imidodiacet acid, 95% min., dms, c.t.o.b. works, .... ib. .... 3.00 -

Indole, crude, .... ib. .... 2.50 -

Inositol, 50-lb. cans, 1000 lbs, .... ib. .... 26.50 -

Iodine, crude, dms, .... ib. .... 17.50 22.00

Iodine, 13.50, 18.00

Iodine USP, .... ib. .... 14.21 14.59

Iodocholehydroquin, USP, XVI, 50-kilo dms, 100-149 kilo, frt. .... ib. .... 35.00 45.00

Iodosomes, NF, dms, 300-lbs, f.o.b. .... ib. .... 24.00 -

a-Ionone, dms, .... ib. .... 18.20 -

b-Ionone, dms, .... ib. .... 13.10 -

Isopropenol, whole, bgs, .... ib. .... 25.00 -

Irish moss, bleached, prime, whole, .... ib. .... .55 -

Iron blue, alkali-resistant, bgs, t.i., ton lots, div. E, .... ib. .... 2.70 -

Iron blue, reg., bgs, t.i., ton lots, .... ib. .... 2.00 2.15

# L

Lacquer diluent petroleum, 140°F., 200°F., b.r., t.c., New Jersey and New York, .... gal. .... 1.25 -

Lacquer diluent, petroleum, 200°F., b.r., tankcars, New York and New Jersey, .... gal. .... 1.20 1.25

Lacquer diluent, petroleum, 240°F., b.r., tankcars, New York and New Jersey, .... gal. .... 1.20 1.25

Lacquer diluent, petroleum, 200°F., b.r., tankcars, New York and New Jersey, .... gal. .... 1.20 1.25

Lacquer diluent, petroleum, 240°F., b.r., tankcars, New York and New Jersey, .... gal. .... 1.20 1.25

Lacquer diluent, petroleum, 200°F., b.r., tankcars, New York and New Jersey, .... gal. .... 1.20 1.25

Lacquer diluent, petroleum, 240°F., b.r., tankcars, New York and New Jersey, .... gal. .... 1.20 1.25

Lacquer diluent, petroleum, 200°F., b.r., tankcars, New York and New Jersey, .... gal. .... 1.20 1.25

Lacquer diluent, petroleum, 240°F., b.r., tankcars, New York and New Jersey, .... gal. .... 1.20 1.25

Lacquer diluent, petroleum, 200°F., b.r., tankcars, New York and New Jersey, .... gal. .... 1.20 1.25

Lacquer diluent, petroleum, 240°F., b.r., tankcars, New York and New Jersey, .... gal. .... 1.20 1.25

Lacquer diluent, petroleum, 200°F., b.r., tankcars, New York and New Jersey, .... gal. .... 1.20 1.25

Lacquer diluent, petroleum, 240°F., b.r., tankcars, New York and New Jersey, .... gal. .... 1.20 1.25

Lacquer diluent, petroleum, 200°F., b.r., tankcars, New York and New Jersey, .... gal. .... 1.20 1.25

Lacquer diluent, petroleum, 240°F., b.r., tankcars, New York and New Jersey, .... gal. .... 1.20 1.25

Lacquer diluent, petroleum, 200°F., b.r., tankcars, New York and New Jersey, .... gal. .... 1.20 1.25

Lacquer diluent, petroleum, 240°F., b.r., tankcars, New York and New Jersey, .... gal. .... 1.20 1.25

Lacquer diluent, petroleum, 200°F., b.r., tankcars, New York and New Jersey, .... gal. .... 1.20 1.25

Lacquer diluent, petroleum, 240°F., b.r., tankcars, New York and New Jersey, .... gal. .... 1.20 1.25

Lacquer diluent, petroleum, 200°F., b.r., tankcars, New York and New Jersey, .... gal. .... 1.20 1.25

Lacquer diluent, petroleum, 240°F., b.r., tankcars, New York and New Jersey, .... gal. .... 1.20 1.25

Lacquer diluent, petroleum, 200°F., b.r., tankcars, New York and New Jersey, .... gal. .... 1.20 1.25

Lacquer diluent, petroleum, 240°F., b.r., tankcars, New York and New Jersey, .... gal. .... 1.20 1.25

Lacquer diluent, petroleum, 200°F., b.r., tankcars, New York and New Jersey, .... gal. .... 1.20 1.25

Lacquer diluent, petroleum, 240°F., b.r., tankcars, New York and New Jersey, .... gal. .... 1.20 1.25

Lacquer diluent, petroleum, 200°F., b.r., tankcars, New York and New Jersey, .... gal. .... 1.20 1.25

Lacquer diluent, petroleum, 240°F., b.r., tankcars, New York and New Jersey, .... gal. .... 1.20 1.25

Lacquer diluent, petroleum, 200°F., b.r., tankcars, New York and New Jersey, .... gal. .... 1.20 1.25

Lacquer diluent, petroleum, 240°F., b.r., tankcars, New York and New Jersey, .... gal. .... 1.20 1.25

Lacquer diluent, petroleum, 200°F., b.r., tankcars, New York and New Jersey, .... gal. .... 1.20 1.25

Lacquer diluent, petroleum, 240°F., b.r., tankcars, New York and New Jersey, .... gal. .... 1.20 1.25

Lacquer diluent, petroleum, 200°F., b.r., tankcars, New York and New Jersey, .... gal. .... 1.20 1.25

Lacquer diluent, petroleum, 240°F., b.r., tankcars, New York and New Jersey, .... gal. .... 1.20 1.25

Lacquer diluent, petroleum, 200°F., b.r., tankcars, New York and New Jersey, .... gal. .... 1.20 1.25

Lacquer diluent, petroleum, 240°F., b.r., tankcars, New York and New Jersey, .... gal. .... 1.20 1.25

Lacquer diluent, petroleum, 200°F., b.r., tankcars, New York and New Jersey, .... gal. .... 1.20 1.25

Lacquer diluent, petroleum, 240°F., b.r., tankcars, New York and New Jersey, .... gal. .... 1.20 1.25

Lacquer diluent, petroleum, 200°F., b.r., tankcars, New York and New Jersey, .... gal. .... 1.20 1.25

Lacquer diluent, petroleum, 240°F., b.r., tankcars, New York and New Jersey, .... gal. .... 1.20 1.25

Lacquer diluent, petroleum, 200°F., b.r., tankcars, New York and New Jersey, .... gal. .... 1.20 1.25

Lacquer diluent, petroleum, 240°F., b.r., tankcars, New York and New Jersey, .... gal. .... 1.20 1.25

Lacquer diluent, petroleum, 200°F., b.r., tankcars, New York and New Jersey, .... gal. .... 1.20 1.25

Lacquer diluent, petroleum, 240°F., b.r., tankcars, New York and New Jersey, .... gal. .... 1.20 1.25

# **CHEMICAL PRICES**

---

WEEK ENDING NOV 7, 1986

Perchloroethylene, dry cleaning grade, dist., tanks, divd.	.28½	-
Indust. grade, consumers, tanks, divd.	.31	-
Perf. acid, dms.	2.55	-
Permanent red 2B, (red 4B), calcium salts, dms., f.t. std.	6.25	-
barium salts, same basis	6.25	-
Peru balsam, f.o.b.	3.25	-
Petitgrain oil, Paraguay	6.00	-
Petroleum, USP, snow white, dms., c.i., refy.	.375	-
tanks, refy.	.310	-
USP, soft white, dms., c.i., refy.	.375	-
tanks, refy.	.310	-
USP, yellow, dms., c.i., refy.	.370	-
Petroletum, USP, yellow, tanks, refy.	.305	-
USP, cream, dms., c.i., refy.	.385	-
tanks, refy.	.30	-
USP, soft yellow, dms., c.i., refy.	.350	-
tanks, refy.	.285	-
USP, amber, dms., c.i., refy.	.345	-
tanks, refy.	.280	-
Petroleum pitch (see Asphalt, petroleum).		
Petroleum sulfonate, 80-62% sulfonic cont., HMW, bulk, works.	.494	.49
MMW, same basis	.49	-
LMW, same basis	.49	.49½
Prices for 51% sulfonic content 2¢ per lb. lower on corresponding molecular wt.		
Phenacetin USP, powd., 200-lb. dms., 1,000-lb. lots, divd.	2.20	-
100-lb. dms., 1,000-lb. lots, divd.	2.22	2.45
p-Phenodinitro, dms., c.i., f.o.b.	2.00	-
Phenobarbital, USP, dms., 500-kilo lots, f.o.b. works	18.50	-
Phenobarbital-sodium, NF, 500-kilo lots, f.o.b. works	27.00	-
Phenol, syn. tanks, f.t. equald.	.25	.29
p-Phenoxyisophthalic acid, 85% sol'n., dms., c.i., f.o.b. works	.84	-
tanks, same basis	.58	-
Phenothiazine, Indust. grade, 50-lb. bags, c.i., f.o.b. works	2.33	-
purif. grade, same basis	2.69	-
Phenyl acetate, dms., 100-lb. lots, works.	1.04	-
Phenylic acid, pure cryst., 25-lb. cans.	4.50	-
di-Phenyliamine, dms., 25-kilo lots	84.00	-
1-Phenyl-3-carboxy pyrazolone-5, dms., 200-lb. lots, divd. E.	3.45	-
m-Phenylenediamine, cast, dms., c.i., t.i., f.o.b. works	2.07	-
o-Phenylenediamine, flaked, dms., t.i., f.o.b. works	3.25	-
p-Phenylenediamine, flaked, dms., f.o.b. works	4.00	-
Phenylephrine hydrochloride, USP 100-kilo lots or more	175.00	185.00
Phenylethyl acetate, dms.	3.35	-
2-Phenylethyl alcohol, NF, dms.	2.10	2.20
b-Phenylethylamine, dms., 30,000 lbs. or more, f.t. std.	1.80	-
Phenylethylphenyl acetate, 25-lb. cans.	5.50	6.00
Phenylyglyconic acid (see Mandelic acid).		
Phenylyhydrazine, 99% min., dms.	3.50	-
1-Phenyl-3-methyl-5-pyrazolone, dms., 250-lb. lots, divd. E.	1.80	-
c-Phenylphenol, dms., t.i. works.	1.35	2.00
p-Phenylphenol, bags, t.i. 40,000 lbs. or more, works.	1.85	-
Phenylpropanolamine hydrochloride, 100-kilo dm.	24.00	28.00
Phenylsuccinate, pure, cryst., dms., E.	2.75	-
tech. cryst., E.	2.25	-
flake, E.	2.35	-
Phioxine toner (red 90), dms., f.t. std.	1.95	2.05
Phosgene, 1-ton ret. cyls., 5 to 9-cyl. quantities, works.	.55	.67
Phosphate rock, Fla., land pebbles, run of mine washed, 65-68% b.p.i. bulk, c.i. mixes	23.15	-
vessel, Tampa, same basis	28.00	-
Phosphoric acid, com'l. and tech. grades, 7 ½% tanks, works.	29.00	-
80% tanks, works	31.00	-
85%, N.F. tanks, f.o.b. freight equald.	33.50	-
Food grade prices \$2.00 above tech. grade.		
Phosphoric acid, agricultural grade, 52-54% a.p.a., tanks, works	3.10	-
super, min. 70% a.p.a., same basis	3.48	-
Phosphorus, white (yellow) solid dms., c.i., works, f.t. equald.	1.00	-
tanks, works, f.o.b. works.	.91	-
Phosphorus oxychloride, tanks, f.t. equald.	.40	-
Phosphorus pentasulfide, powd., dms., c.i. works.	60.00	-
tote bins, sellers	45.00	-
Phosphorus pentoxide, dms., t.i. works.	.82	-
Phosphorus sesquisulfide, dms., c.i. works.	.38	-
Phosphorus trichloride, dms., c.i. works.	.40	-
tanks, works.	.35	-
Phthalic anhydride, flake, c.i., t.i. dms., f.t. equald.	.30	-
molten, tanks, same basis	.27	-
Prices 1-1½¢ per lb. higher on the West Coast.		
Phthalimide, flake, works	.65	-
Phthalocyanine blue toner, red shade,		
bbis., f.t. std. E. of Rockies	8.10	9.50
green shade, same basis	6.40	8.50
Pigment green B, kgs.		
Pigment green B, kgs., 1,500.00	2,000.00	-
Pilocarpine hydrochloride, USP, dms.		
Pimento see Adspice		
Pimento leaf oil, dms.	.13.90	-
Pine oil, 80% min. alcohol content, bulk, f.o.b. works.	100 lbs	47.00
dms., c.i., t.i., same basis	100 lbs	51.00
a-Pinene, perfume grade	kilo	1.82
tech. grade	f.t.	.18
b-Pinene, perfumery grade, tanks	kilo	2.30
tech. grade, tanks	lb.	.35
Piperazine, anhyd., dms., t.i., f.t. std.	lb.	1.80
Piperazine citrate, 38%, dms., 1,100-lb. lots, f.t. std.	lb.	2.25
Piperazine dihydrochloride, 63%, dms., t.i., f.t. std.	lb.	2.00
Piperazine hexahydric, 44%, dms., 1,100-lb. lots, f.t. std.	lb.	1.80
Piperazine phosphate, 42%, dms., t.i., f.t. std.	lb.	1.80
Piperidine diat, 98% min., dms., c.i., t.i., works.	kilo	6.92
Piperonyl butoxide dms., divd. E.	lb.	5.00
Platinum, metal, works	Troy oz.	580.00
Polycarbonate resin, pellets, nat., t.i., f.t. std.	lb.	1.84
Polyester resin, unsaturated, g.p., orthophthalic, bulk, tankcars, f.t. std.	lb.	.51
Isophthalic, same basis	lb.	.58
Polyethylene resin, high-density, blow molding, g.p., hopper cars, f.t. std.	lb.	.44
Injection molding, g.p., hopper cars, f.t. std.	lb.	.43
extrusion, g.p., hopper cars, same basis	lb.	.47
wire and cable, nat., hopper cars, same basis	lb.	.54
wire and cable, black, same basis	lb.	.66
Polyethylene resin, low-density, film liner, hopper cars, f.t. std.	lb.	.35
clarity film, hopper cars, f.t. std.	lb.	.35
pellet shrink film, hopper cars, same basis	lb.	.35
extrusion coating, hopper cars, same basis	lb.	.38
g.p., hopper cars, same basis	lb.	.37
blown film resin	lb.	.40
cast film resin	lb.	.40
Polyethylene resin, low-density injection molding, g.p., hopper cars, same basis	lb.	.46
line wire, CATV, power cable	lb.	.70
wire and cable thermoplastic high-voltage, natural color, same basis	lb.	.80
wire and cable, XLPE low voltage, 14% carbon black, same basis	lb.	.68
wire and cable jacketing, black	lb.	.80
Polymyxin sulfate, USP, bulk, 50-billion units min.	million units	.52
Polyoxyethylene sorbitan monostearate, dms., 20,000-lb. lots, works.	lb.	.73
Polyoxyethylene sorbitan triacetate, dms., 20,000-lb. lots, works.	lb.	.73
Polypropylene resin, homopolymer, g.p., nat., t.i., f.t. std.	lb.	.46
copolymer, med. impact, nat., same basis	lb.	.50
high impact, same basis	lb.	.53
Colored material 8c. per lb. higher for each grade.	lb.	.60
Polystryrene resin, cryst., nat., hopper cars, f.t. std.	lb.	.47
Impact, nat., hopper cars, same basis	lb.	.48
high heat, high impact, nat., hopper cars, same basis	lb.	.49
expandable beads (EPS), pkglng grade, 1,000-lb. lots	lb.	.69
modified, same basis	lb.	.71
Polyvinyl alcohol, fully hydrolyzed, medium viscosity	lb. t.i., divd.	1.00
partially hydrolyzed, medium viscosity	lb. t.i., divd.	1.05
Polyvinyl chloride resin, g.p., homopolymer dispersion, bags, t.i., divd.	lb.	.50
g.p. suspension, bulk, same basis	lb.	.38
pipe grade, bulk, same basis	lb.	.47
film grade, bulk, same basis	lb.	.37
Polyvinyl chloride, g.p. copolymer dispersion, same basis	lb.	.58
g.p. copolymer suspension, same basis	lb.	.61
Poppyseed, Dutch, bags	lb.	.45
Turkey, bags	lb.	.59
Potash agricultural (see Potassium muriate).		
Potash caustic, 45% basis, tanks, works.	100 lbs	13.00
Was Coast, 50% basis, tanks, ex terminal	100 lbs	18.00
reg. flake, 55-52%, 400-lb. dms., c.i. works.	100 lbs	42.35
Potassium acetate, NF, gran., dms., t.i. works E.	lb.	.90
Potassium bicarbonate, tech., gran., bags, c.i. works	lb.	1.31
Potassium bicarbonate, USP, gran., bags, c.i. works	lb.	.31½
"Ratio" indicates percentage by weight of SiO <sub>2</sub> , div.		
Potassium silicate, soin, 29-30.2 Be, 2.5 ratio, t.c., t.t., works.	100 lbs	18.90
2.5 ratio, t.c., t.t., works	100 lbs	25.90
Potassium silicate, 40-40.5 Be, 2.1 ratio, t.c., t.t., works	100 lbs	25.05
40-40.5 Be, 2.1 ratio, dms., c.i., t.t., works	100 lbs	32.05
Potassium silicate, 30-30.4 Be, 2.1-2.2 ratio, t.c., t.t., works	100 lbs	28.10
solid or glass, 2.15 ratio, dms., c.i., t.t., works	100 lbs	33.10
solid or glass, 2.5 ratio, dms., c.i., t.t., works	100 lbs	33.30
"Ratio" indicates percentage by weight of K <sub>2</sub> O, div.		
Potassium silicofluoride, bags, c.i., t.t., f.t. equald.	lb.	.11½
Potassium sodium tartrate, NF, gran. or powd., dms.	lb.	.80
Potassium sorbate, t.i. dms., divd. lb.	N.A.	
Potassium stannate, dms., f.t. std. lb.	N.A.	
Potassium sulfate, agricultural grade, min. 50% K <sub>2</sub> O std. bulk, c.i. f.o.b. works	ton	150.00

*ded by*

Potassium tetraborate, gran., bgs., o.t.		1.10
works.....	lb.	
dms., same basis.....	lb.	1.10
Potassium tetraborate powder 160, per ton higher		1.16
Potassium thiocyanate, USP, cryst.		
225-lb. dms., 5-cm lots, f.o.b.	lb.	4.01
tech., cryst., dms., t.i.	lb.	
Potassium titanate, ctms., o.t., works.....	lb.	.92
Potassium-titanium fluoride, tech., dms., t.i., works, frt. equalib.	lb.	
Potassium-zirconium fluoride, tech., dms., t.i., works, frt. equalib.	lb.	1.24
Prednisone USP, dms., 5 kilos or more.....	gram	.78
Prednisolone acetate, USP, dms., 5 kilos or more.....	gram	1.03
Prednisolone, anhyd., USP, dms., 5 kilos or more.....	gram	1.12
Procaine hydrochloride, USP, antibiotic grade, dms., 2,000-lb. lots, frt. alid.....	lb.	1.12
Procaine hydrochloride, USP, ampule grade, dms., 1,000-lb. lots, frt. alid.....	lb.	4.95
Propionaldehyde, tanks, f.o.b. ....	lb.	4.95
Propionic acid, syn., pure, tanks, divd. E.....	lb.	.35
n-Propyl acetate, tanks, divd. ....	lb.	.33
n-Propyl alcohol, tanks, divd. ....	lb.	.89
n-Propyl gallate dms., 100 to 2,000-lb. lots, divd. ....	lb.	.42
n-Propyl-p-hydroxybenzoate, USP, 500 kilos, f.o.b. ....	kilo	11.80
Propyl paraben (see n-Propyl-p-hydroxybenzoate)		
Propyl thiomurel, dms., 50-kilo lots or more.....	lb.	
n-Propylamine, dms., c.i., divd. ....	lb.	55.00
Propylene, polymer grade, f.o.b. Tex. and La. Gulf Coast points, chemical grade same basis.....	lb.	.17
Propylene glycol, Indust., tanks, f.o.b. ....	lb.	.40
USP, tanks, f.o.b. E.....	lb.	.43
Propylene glycol monomethyl ether, tanks, divd. E.....	lb.	.49
Propylene oxide, tanks, f.o.b. works, frt. equalid.....	lb.	.47
Pumice seed, USP powd bgs. ....	lb.	1.50
Pumice, dom., fine, 4F-0, bgs., ton lots.....	ton	270.00
medium, 0½-1½, bgs., ton lots, ton coarse, 2-extra coarse, bgs., ton lots.....	ton	300.00
Pumice, imp., Italian, fines, bgs., ton lots.f.o.b. East Coast, medium, bgs., ton lots, f.o.b. East Coast.....	ton	380.00
coarse, bgs., ton lots f.o.b. East Coast.....	ton	300.00
Pyrazolone red (red 38), dms., works.....	lb.	5.28
Pyrethrum flowers, fine grd. 0.9% pyrethrins, ton lots, frt. alid, lb.	lb.	1.91
Pyrethrum, purf., 20% pyrethrins, dms., works.....	lb.	37.60
Pyridine, refd., 2-deg., c.i., works dms., tanks.....	kilo	5.80
Pyridoxine hydrochloride, USP, 100 kilos or more, divd. ....	kilo	36.00
Pyrites, Canadian 48-50% S. mines, longton	lb.	4.50
Pyrogallic acid (see Pyrogallol)		
Pyrogallol, 100-lb. dms., 1,000-lb. lots, divd. ....	lb.	13.70
Q		
Quassia chips.....	lb.	.57
Quinacridone maroon, dms., frt. alid, red, dms., frt. alid.....	lb.	20.75
scarlet, dms., frt. alid.....	lb.	17.75
violet, dms., frt. alid.....	lb.	17.75
Quince seed, bgs. ....	lb.	2.00
Quinidine sulfate, USP, 1,000-oz. dms., 2,000 oz. or more, oz. ....	lb.	4.20
Quinine hydrochloride, NF, 1,000-oz. dms., 2,000 oz. or more, oz. ....	lb.	2.45
Quinine sulfate, USP XVII, 1,000-oz. dms., 2,000 oz. or more, oz. ....	lb.	2.30
Quinoline, dms., t.i., frt. equalid, tanks, same basis.....	lb.	1.49
Quinoline, dms., t.i., frt. equalid, tanks, same basis.....	lb.	1.43
R		
R salt tech., SO4 molecular wt. ....	lb.	2.12
Recamethonine, USP, 50-250 kilos.....	lb.	6.80
250-500 kilos.....	lb.	6.80
500 or more kilos, feed grade, 99% min., o.t., t.i. ....	lb.	1.07
Repeased oil, dms. ....	lb.	.58
Reuwolfia serpentina root, powd. bds. ....	lb.	22.00
Red carmine, No. 40 (see Carmine No. 40)		
Red precipitate, (see Mercurio oxide, red)		
Reserpine, USP, cryst., bogs. ....	gram	.40
Resorcinol, tech., bgs., t.i., works, divd. ....	lb.	3.96
Resorcinol, USP, cryst., dms. 50 kilo or more, works.....	lb.	9.35
powd. dms., same basis.....	lb.	9.00
Resorcinol monoacetate, dms., 1,000 lbs. or more, ....	lb.	1.98
Rhodamine red toner, molybdated, PMA, dms, works.....	lb.	9.25
tungstated, PRIMA, dms., f.o.b. works.....	lb.	11.50
Rhodinol, 25-lb. cans, syn., dms. ....	lb.	10.00
Rhubarb root, India, whole, bgs., powd., bgs. ....	lb.	.45
Riboflavin, feed grade, 25 kilos, dms. ....	lb.	19.50
Riboflavin, USP, 25 kilos, chrd. ....	lb.	48.00
Rubber latex, 50% zinc stearate, 25	lb.	100.00
S		
Rice bran oil, refined dms. t.i. ....	lb.	1.25
Ricinoleic acid (see Castor oil acids, split)		
Rochelle salt (see Potassium-sodium tartrate)		
Roofing pitch (see Coal tar pitch, roofing.)		
Rose oil, nat., NF, Bulgarian, Otto, both.....	lb.	6,700.00
Turkish, citr., bogs. ....	lb.	6,600.00
Rosemary, NF, Spanish, dms. ....	kilo	9.00
Tunisian, dms. ....	kilo	15.00
Rutene resin, 30-45%, 100-lb. dms. works.....	unit-lb.	.21
Rutene resin, 30-45%, 100-lb. dms. works.....	unit-lb.	.23

# CHEMICAL PRICES

WEEK ENDING NOV 7, 1986

Sodium bicarbonate, USP, powd., reg. grade, bgs., c.i., t.i., works, frt. equalized . . . . .	17.05	-	Sodium orthosilicate, tech., anhyd., bgs., c.i., works . . . . .	34.50	-
coarse, same basis . . . . .	18.05	-	Sodium orthocarbonate, tech., hydrated, flake, dms., c.i., works . . . . .	27.45	-
fine, same basis . . . . .	17.20	-	bgs., c.i., works . . . . .	26.25	-
gran., same basis . . . . .	17.85	-	Sodium oxalate, 99%, bgs., t.i., works, lb. . . . .	.45	-
gran., fine, same basis . . . . .	17.60	-	Sodium pentachlorophenate, beads c.i., 30,000-lb min. . . . .	.67	-
Sodium bichromate, gran., bgs., c.i., t.i., works, frt. equalized . . . . .	.57	-	bgs., c.i., works . . . . .	.66	-
Sodium bifluoride, 400-lb. dms., c.i., frt. equalized . . . . .	.78	-	Sodium pentobarbital (see Pentobarbital-sodium).		
100-lb. bgs., c.i., same basis . . . . .	.78	-	Sodium perborate, tetrahydrate, tech., bgs., c.i., t.i., works . . . . .	.32½	.36½
Sodium bisulfite, bulk, c.i., works, ton dms., c.i., . . . . .	176.00	13.00	Sodium perosulfate, 225-lb. dms., 24,000 lb. or more, f.o.b. plant . . . . .	.63½	-
Sodium bisulfite, anhyd., bgs., c.i., t.i., works, East . . . . .	100 lbs.	-	Sodium phenobarbital (see Phenobarbital-Sodium).	.62	-
works, West . . . . .	100 lbs.	-	Sodium phenosulfonate, powd., dms., lb. . . . .	.76	-
Sodium bisulfite, sohd., 36%, bulk, 100% basis, works, East . . . . .	100 lbs.	-	Sodium phosphate, anhyd., dibasic tech., bgs., c.i., t.i., works, frt. equalized . . . . .	54.50	-
sohd., 100%, bulk, works, West 100 lbs. photographic grade, 43% sohd., works . . . . .	100 lbs.	-	food grade, same basis . . . . .	57.50	-
Sodium borate NF, gran., bgs., c.i., works . . . . .	28.50	-	same basis . . . . .	55.75	-
powd., same basis . . . . .	.51	-	food grade, same basis . . . . .	59.75	-
Sodium borohydride, powd., dms., 1000-5000 lbs. works . . . . .	.52	-	tribasic, tech., same basis . . . . .	52.25	52.75
Sodium borohydride, stabilized water soln., 12% NaBH <sub>4</sub> , 100% basis, 3000 gal. tankwagon, works, lb. . . . .	19.88	21.00	food grade, same basis . . . . .	63.25	-
Sodium bromide, 99%, gran., 400-lb. dms., f.o.b. works . . . . .	1.04	-	chlorinated, same basis . . . . .	31.50	-
Sodium carbonate, decahydrate, bgs., c.i., t.i., works . . . . .	ton	-	cryst., tech., same basis . . . . .	30.50	-
Sodium carbonate, cryst. monohydrate (see Soda, ash)	284.00	-	cryst., food grade, same basis . . . . .	35.50	-
Sodium carbonate, monohydrated, bgs., c.i., t.i., works . . . . .	ton	-	USP, dried, powd., bgs., dms., works . . . . .	.19	20½
Sodium carboxymethylcellulose (see CMC.)	392.00	-	Sodium picramate, tech., paste . . . . .	.19	-
Sodium chlorate, crystal, bulk, t.c., delivered, N.E. . . . .	330.00	-	Sodium propionate, dms., 2,000 lbs. or more, f.o.b. frt. eqld. . . . .	.54	-
delivered, S.E. . . . .	335.00	-	Sodium pyrophosphate, acid, tech., bgs., c.i., works, frt. equalized . . . . .	58.25	-
Sodium chlorate, cryst., 450-lb. dms., c.i., works, E. . . . .	.27	-	food grade, non-leavening, bgs., c.i., works, frt. equalized . . . . .	61.25	-
Sodium chloride, tech. (see Salt.)	.28	-	Sodium pyrophosphate, ferric, dms., c.i., t.i., works . . . . .	.3880	-
Sodium chloride, USP, gran., bgs., lb. . . . .	.28	-	Sodium pyrophosphate, tetrabasic, anhyd., tech., bgs., c.i., t.i., works, frt. equalized . . . . .	44.75	-
Sodium chloride, tech., dms., c.i., works . . . . .	.17	1.27	bulk, hopper cars, same basis . . . . .	42.50	-
Sodium chromate, anhyd., dms., c.i., t.i., works . . . . .	.67	-	food grade, bgs., c.i., t.i., same basis . . . . .	53.00	-
Sodium chromate, tetrahydrate, bgs., c.i., t.i., works . . . . .	.64	-	Sodium silicate, USP, cryst., 200-lb. dms., 1,000-lb. lots or more, works, frt. equalized . . . . .	3.00	-
Sodium citrate, gran., anhyd., 200-lb. dms., c.i., t.i., N.Y. . . . .	1.95	-	USP, powd., 200-lb. dms., 1,000-lb. lots or more, same basis . . . . .	3.05	-
Sodium citrate, USP, gran., dihydrate, 100-lb. bgs., t.i., f.o.b. shipping point . . . . .	.74½	-	Sodium sesquicarbonate, bkg., c.i., t.i., works . . . . .	170.00	-
Sodium cyanate, dms. 1,000-lb. lots, works . . . . .	.85	-	bgs., c.i., t.i., works . . . . .	188.00	-
Sodium cyanide, briquettes or gran., 99% min., 200-lb. dms., min. divd. . . . .	.71	-	Sodium silicate, solid, or glass, 3.22-3.25 ratio, bulk, c.i., t.i., works . . . . .	16.70	-
Sodium dicetate, anhyd., dms., c.i., works . . . . .	.68	-	bgs., c.i., t.i., works . . . . .	27.75	-
Sodium dicetate, FCC, 50-lb. bgs., t.i., divd. E. of Rockies . . . . .	.61	.67	1.95-2.00 ratio, bulk, c.i., t.i., works . . . . .	20.30	-
Sodium dicetate, tech., 50-lb. dms., c.i., works . . . . .	.52	-	bgs., c.i., t.i., works . . . . .	22.15	-
Sodium erythorbate, powd., gran., t.i. or mixed t.i., f.o.b. shipping point . . . . .	2.60	2.85	"Ratio" indicates percentage by weight of SiO <sub>2</sub> divided by percentage by weight of Na <sub>2</sub> O.	6.30	-
Prices W. of Denver 2c. per pound higher.			Sodium silicofluoride, bgs., c.i., t.i., works, frt. equalized . . . . .	17.95	19.75
Sodium ferrocyanide, bgs., t.i., works . . . . .	.60	-	Sodium stannate, dms., wks. frt. eqld. E.B. . . . .	N.A.	-
Sodium fluorinate, tech., gran., dms., t.i., works, frt. equalized . . . . .	1.77	-	Sodium sulfanilate, dms., works . . . . .	.22	-
Sodium fluoride, white, 97%, 400-lb. dms., c.i., works, frt. equalized . . . . .	.6345	-	Sodium sulfate, NF XII, powd., dms., 2,000-lb. lots . . . . .	.23½	-
100 bgs., c.i., same basis . . . . .	.60	-	tech., detergent, rayon-grade, c.i., works, Gulf . . . . .	90.00	98.00
USP powd., 200-lb. dms., t.i., f.o.b. shipping point . . . . .	4.69	-	Sodium sulfate, West, bulk, c.i., works, frt. equalized . . . . .	90.00	101.00
Sodium formate, bgs., c.i., works . . . . .	.20	-	bulk, c.i., East, same basis . . . . .	113.00	114.00
Sodium gluconate, tech., 50-lb. bgs., 2,500 lbs. or more frt. eqld. . . . .	.60	-	Sodium sulfate, photo grade, 100-lb. bgs., c.i., works . . . . .	47.00	53.00
Sodium hydride, oil dispersion, 80% NaH, 167-lb. dms., 10 dms., works . . . . .	1.86	-	Sodium sulfhydrate, flake, 70-72%, dms., c.i., works, frt. equalized . . . . .	500.00	-
Sodium hydrosulfide (see Sodium thiosulfate.)	.84	-	equil. . . . .	500.00	-
Sodium hydrosulfite, dms., c.i., t.i., f.o.b. shipping point E . . . . .	.98	1.08	Sodium sulfide, flake, dms., c.i., works, E., frt. equalized . . . . .	470.00	-
Sodium hydroxide, USP, pellets, 100-lb. dms., c.i., t.i., works, frt. equalized . . . . .	.98	1.08	bgs., same basis . . . . .	410.00	-
Sodium hydroxide, tech. (see Soda, caustic.)			Sodium sulfide, fused, dms., c.i., works, E., frt. equalized . . . . .	240.00	-
Sodium hypophosphite, EN grade, 300 lb. dms. f.o.b. works . . . . .	1.425	1.50	Sodium sulfite, anhyd., tech. 95-100% bgs., f.o.b. works . . . . .	23.76	-
110 lb. dms. . . . .	1.47	1.52	ton	23.76	-
Sodium hyposulfite (see Sodium thiosulfate.)			Sodium sulfocyanide CP (see Sodium thiocyanate).		
Sodium iodide, USP, cryl., 300- to 500-lb. lots, dms. frt. equalized . . . . .	14.72	-	Sodium tetraborate (see Borax.)		
Sodium lauryl sulfate, 30%, tanks, 100-lb. works . . . . .	.29	.32	Sodium tetrasulfide, liq., 34% dms., c.i., works, frt. equalized . . . . .	540.00	-
Sodium lignin sulfonate, bgs., c.i., works . . . . .	25.50	-	Sodium thionylate, purif., cryst., 250-lb. dms., 5 dms. or more f.o.b. works . . . . .	3.28	-
Sodium metabisulfite (see Sodium bisulfite).			tech., anhyd. dms., 2,000 lbs. or more works . . . . .	.97	-
Sodium metaborate, octahydrate, gran., bgs., c.i., works . . . . .	.38	-	Sodium thiosulfate, tech., photo grade, anhyd., 100-lb. bgs., c.i., t.i., works, frt. equalized . . . . .	45.50	-
tetrahydrate, gran., bgs., c.i., works . . . . .	.49	-	cryst. pentahydrate, c.i., t.i., same basis . . . . .	28.50	-
Sodium metatellite, 12-lb. briks, dms., c.i., works . . . . .	.93	-	Sodium titanate, dms., c.i., works . . . . .	.1414	-
fused, dms. 24,000-lb. lots or more, works . . . . .	.87	-	Sodium trihaloacetate, 95%, 50-lb. bgs., c.i., frt. eqld. E . . . . .	.28	-
tanks, works . . . . .	.70	.90	Sodium tripolyphosphate, tech., bgs., c.i., t.i., works, frt. equalized . . . . .	39.75	-
Sodium metaphosphate, tech. bgs., c.i., f.o.b. shipping pt. frt. equalized . . . . .	61.50	-	bulk, hopper cars, same basis . . . . .	37.50	-
100 lbs. foodgrade, bgs. c.i. f.o.b. frt. equalized . . . . .	68.25	-	ton	48.50	-
Sodium metasilicate, anhyd., bgs., c.i., works . . . . .	27.25	-	Sodium tungstate, tech., high moly. dms., 10,600 lbs. or more, frt. eqld. . . . .	5.00	8.50
bulk, c.i., works . . . . .	25.30	-	Folin grade dms., 10,800 lbs. or more, same basis . . . . .	8.00	-
pentahydrate, bgs., c.i., f.o.b. shipping point . . . . .	18.95	-	Sodium ammonium phosphate, purif., cryst., dms., works . . . . .	.52	-
bulk, c.i., works . . . . .	17.20	-	Sodium-formaldehyde sulfoxylate, dms., t.i., f.o.b. works . . . . .	.91	-
Sodium molybdate, anhyd., dms. f.o.b. works, 100 lbs and over . . . . .	4.87	-	Sodium-zirconyl sulfate, dms., 1,000-lb. lots or more, works . . . . .	.28	-
cryst., dms., t.i., same basis . . . . .	4.12	-	tech., dms., any quantity, works . . . . .	.16	-
Sodium naphthalene, dms., c.i., t.i., f.o.b. works . . . . .	2.00	-	Solvent naphtha, petroleum, straight aromatic, b.r. 320°-350°F, 60°F m.p., tanks		
Sodium Nitrate, USP, bgs., c.i., f.o.b. frt. equalized . . . . .	34.50	-	New Jersey . . . . .	1.52	-
imp. com., 100-lb. bgs., c.i., All. or Gulf whee . . . . .	284.00	292.00	Houston . . . . .	1.41	-
bulk, c.i., same basis . . . . .	250.00	-	Illinois . . . . .	1.54	-
imp. com., 100-lb. bgs., c.i., All. or Gulf whee . . . . .	205.00	214.00	Solvent naphtha, petroleum, straight aromatic, b.r. 360°F, 410°F, 60°F m.p., tanks		
bulk, c.i., same basis . . . . .	182.00	-	New Jersey . . . . .	1.30	1.38
imp. agricultur., bulk, c.i., same basis . . . . .	140.00	-	Houston . . . . .	1.30	-
bulk, c.i., same basis . . . . .		-	Illinois . . . . .	1.80	1.85
Sodium nitrite, 118%, dms., c.i., works . . . . .		-	Quebec . . . . .	2.50	3.10
Sodium nitrobenzene, 98%, bgs., c.i., t.i., works . . . . .		-			

# **CHEMICAL PRICES**

---

WEEK ENDING NOV 7 1986

Sorbitan monostearate, dms., c.i., t.i., 30,000 lb. min., f.o.b. works.	.76
Sorbitan tristearate, c.i., t.i., 30,000 lb. min., f.o.b. works.	.80
Sorbitol, USP, reg. 70% aqueous, dms., c.i., f.o.b. shipping point.	.35
tanks, f.o.b. shipping point, lb.	.30
gran., dms., c.i. t.i., works	.70
powd., dms., c.i., t.i., works	.68
Soybean meal (See Oils, Fats & Waxes market report.)	
Soybean oil acidulated, soapstock, 95% acid, tanks, New York.	.14
Soybean oil, acid, dbl. dist., dms., lb. tanks.	.48
s.d., dms.	.43
tanks	.47
Spearmint leaves, Imp. bals.	.250
Spearmint oil, Far West, native	14.00
Midwest, native	10.00
Far West, Scotch	15.00
Midwest, Scotch	14.50
Spruce oil, dms.	.80
St. John's bread, edible, bals.	.28
Stannic chloride, anhyd., dms., t.i., works.	N.A.
Stannic oxide, dms., works	N.A.
Stannous chloride, anhyd., dms. wks. lb.	N.A.
Stannous fluoroborate, liq., conc., dms., t.i., works, frt. equal.	2.50
Stannous oxide, dms., works	N.A.
Stannous sulfate, dms., works	N.A.
Stearic acid, double pressed, bulk	.28
single-pressed, bulk	.28
triple-pressed, bulk	.32
Stramonium leaves, bals.	.15
Streptomycin sulfate, USP, bulk, kilo.	47.00
Stronitium carbonate, glass grnd., bgs., t.i., works	.37 1/4
Stronitium nitrate, 50-15 bgs., c.i., works	51.50
Styrene monomer, 99.6% min. t.c., t.i., f.o.b. works	.22
Styrene-acrylonitrile resin, nat., bulk, f.o.b. plant	.77
cryst., bulk, same basis	.77
clear, same basis	.77
Styrol acetate, dms.	2.36
Succinic acid, purif. cryst., dms., t.i., frt. equal	2.00
Succinyl anhydride, dms., c.i., t.i., f.o.b. work	1.71
Sucrose, refd., white, bgs., c.i., f.o.b. refy. E.	33.10
Sucrose acetate, Isobutyrate, 90% dms., t.i., divd.	1.18
tanks, divd.	1.10
100%, dms., t.i., divd.	1.18
Sucrose octa-acetate, denaturing grade, 100-lb. dms., f.o.b. works	12.50
Sulfabenzamide, dms., 500 kilos, kilo.	38.50
Sulfabenzamide-sodium, dms., 500 kilos	25.00
Sulfacetamide, USP, dms., 500 kilos	20.00
Sulfadiazine, USP, powd., dms., 500 kilos	53.00
Sulfadiazine-sodium, USP, dms., 500 kilos	40.70
Sulfamerazine, USP, microcrystals, dms., 500 kilos	33.50
USP, powd., dms., 500 kilos	32.00
Sulfamethazine-sodium, USP, powd. dms., 50 kilos	13.00
Sulfamethazine, powder, dms., 500 kilos	9.00
Sulfamic acid, cryst., bgs., c.i., t.i., works	38.00
100 lbs.	41.00
Sulfamic acid, gran., dms., c.i., t.i., works	.38
Sulfanilamide, NF, reg. 1,000-lb. dms., frt. equal	2.00
Sulfanilic acid, tech., bgs., t.i., f.o.b. works	.67 1/2
Sulfaliquinoxaline, veterinary, grade, dms.	8.00
Sulfur, crude, bright, molten, dom., f.o.b. vessels, Gulfports	long-ton
f.o.b. La. refy.	long-ton
recovered, divd., Houston	long-ton
ex terminal, Rotterdam	long-ton
f.o.b. tanks, Alberta, Canada, for US. delivery	long-ton
dark, ex-Tampa, Fla.	long-ton
Sulfur, crude, 99.6% min. purity, coml. flour, 50-lb. bgs., c.i., mines basis	102.00
100 lbs.	167.50
Jump, same basis	100 lbs.
Sulfur, refd., 99.5% min. purity, rolls 50-lb. bags, c.i., mines basis	13.50
100 lbs.	13.60
flour, tight, 50-lb. bgs., same basis	17.50
100 lbs.	20.00
Sulfur, refd., sublimed, NF, 99.85% min. purity, 50-lb. bgs., c.i., mines basis	14.50
100 lbs.	15.60
Sulfur, rubbermakers, 99.5% min. purity, coml. reg. 50-lb. bgs., c.i., mines basis	14.50
100 lbs.	15.60
fine, 99% min. passing through 325 mesh, same basis	100 lbs.
Sulfur dichloride, dms., c.i., works, frt. equal	.24
tanks, same basis	.17 1/2
Sulfur dioxide, liq., bulk, t.i., f.o.b. works	230.00
Sulfur monocloride, dms., c.i., works, frt. equal	.22 1/2
tanks, same basis	.18 1/2



# AARON

## EQUIPMENT COMPANY

DIVISION APEC, INCORPORATED  
735 EAST GREEN STREET  
P.O. BOX 80  
BENSONVILLE, IL 60106

(312) 350-2200  
TX 28 9454 - CABLE AARONECO

### AARON BUYS PLANTS: TOP DOLLAR PAID FOR PROCESS EQUIPMENT... CALL US TODAY!!

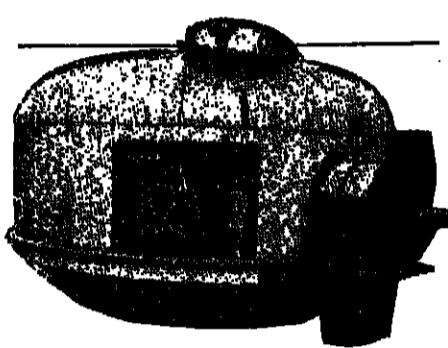
#### LIQUIDATION SALE LARGE POLYSTYRENE PLANT

ILLINOIS LOCATION

21880-Pfeudler Reactor, 1,500 gal., 316L SS dimple jkt.  
21881-Pfeudler Reactor, 10,000 gal., 316L SS clad, 80 HP. (4)  
21900-Pfeudler Reactor, 15,000 gal., 316L SS dimple jkt. (3)  
21897-Metal Arts Corp. Tank, 17,000 gal. vert. 317L SS. (2)  
21898-Brighton Corp. Tank, 12,000 gal. vert., solid 316L SS. (2)  
21899-Brighton Corp. Tank, 17,000 gal. vert., solid 316L SS. (2)  
21900-Brighton Corp. Tank, 12,000 gal. vert., solid 316L SS. (2)  
21895-Sperry Filter press, 178 cu. ft., S/S, cone bottom flat top. (4)  
21896-Bins, 450 cu. ft., C/S, epoxy lined. (8)  
21897-Bins, 500 cu. ft., C/S, epoxy lined. (8)  
21898-Bins, 500 cu. ft., C/S, epoxy lined, flat top, con-  
tainer. (4)  
21899-Worthington centrif. pump, C/S, 15HP, 200 GPM at  
44 psig. (2)  
21910-Union Pump-Inline, C/S, mod. 4x8x5 VCK, 40 HP. (4)  
21920-Edeon Ronnenburg Rot. Dryer, S/S, steam heat, 10 HP. (4)  
21891-Hesters, C/S steam, type BNF 2420 (8)  
21892-Hesters, C/S steam, type BNF 2420 (8)  
21893-Kalnen Feeder, vibratory, 12 cu. ft., 12 bags.  
21894-Kalnen Feeder, vibratory, 35 cu. ft., mod. 5400-150 (4)  
21895-Sperry filter, 352 cu. ft., C/S, mod. VF-32-32.  
21896-Screw conveyor, 304 SS, 7" dia. x 11L, 1.5 HP.  
21897-Screw conveyor, 304 SS, 7" dia. x 11L, 1.5 HP.  
21898-Screw conveyor, 304 SS, 7" dia. x 11L, 1.5 HP.  
21899-Screw conveyor, 304 SS, 7" dia. x 11L, 1.5 HP.  
21900-Welox extruder 8" dia. x 10' L/D, 400 HP.  
21901-Welox extruder 8" dia. x 10' L/D, 800 HP.  
21973-Conair blower, 8" dia., 1024, 40 HP. (2)  
21974-Weber bath, S/S, portable. (4)  
21987-Ross Static Mixer, 304SS, 1" dia. element. (4)  
21917-Imperial Band pump, in-line pump, C/S, 30 HP.  
21918-Goulds C/S pump, 200 HP. (2)  
21919-Worthington pump, C/S, 44 PSIG. (4)  
21920-Unison pump-in-line, S/S, 7.5 HP (2)  
21921-Tank, 840 gal., flat top & bottom.  
21922-Modern Welding Tank, 4800 gal. horiz. rubber  
lined.  
21878-Gorman Rupp pump, centrifugal C/S, mod.  
82ZC. (2)  
21871-Predux extruder 8" dia. x 10' L/D, 800 HP.  
21892-Buffalo blower, size 30, C/S, 10 HP. (3)  
21908-Buffalo exhaust fan, size 36, type 8, 15 HP.  
21880-Sutor Bill Blower, C/S, 40 HP. (4)  
21922-Buffalo blower, type 40-3CB, 40 HP. (4)  
21894-Buffalo blower, mod. 45-3CB, 75 HP. (3)  
21883-Bird, 32x50 centrifuge, 80:1 gearbox. (2)

#### FILTER PRESSES

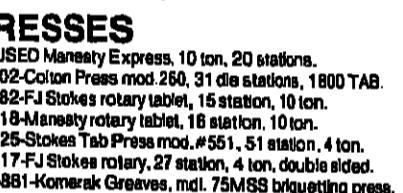
19846-Shiner PBF filter press, 12" x 12" alum. plates,  
closed delivery, 23 chambers.  
20534-Sperry Filter Press, 30", alum.  
20535-Sperry filter press 30", 35 aluminum plates, 35 sq.  
15370-Shiner 32" x 32", polypropylene, 27 plates, ratchet  
clamping.  
15929-Shiner ALP, plate & frame, 16 3/8" x 38", S/S re-  
cessed plates.  
19730-Clevy-Bethlehem filter press, 36", recessed plates, 25  
chambers.  
2016-Sperry filter press, 36", cast iron plate, closed deliv.  
19462-Independent filter press, 42" x 42", polypropylene,  
4 eye closed, 34 chambers.  
20350-Sperry filter press, 42" End closer, 41 alum. plates.



21772-Dreckausche (Stoessnund Type) Pressure batch filter,  
11" Dia., 78 Sq. Ft., jacketed, agit. 15 HP, Side Discharge...  
Call Herb Landy (312) 350-2200

#### FILTER-ROTARY VAC

15828-FE Inc. 36" dia x 12", S/S, string disc, 1/2 HP.  
17477-FE, Inc. 3" dia x 5", T316SS, belt disc, vac/pump.  
11177-Dorr Oliver 56, 5" dia. x 6".  
11653-Oliver T-316SS, precoat 5" x 8".  
19431-K. S. flexible, 6" dia x 6" face, manif. S/S.  
18382-Emco belt filter, 6" dia x 10", steel chum, Nash pumps.  
15627-Ametek, 8" dia x 14" face, manif. S/S.  
17936-Emco, 316SS, 10" dia x 14", manif. S/S.  
17283-Imperial filter, 12" dia x 12", 304SS, Nash vacuum.  
12021-K.S. T-304, vacuum filter, 12" dia x 12", 304SS.  
20233-Dorr Oliver 11" 8" x 15" face, 5/8 cont. parts.  
11486-Emco single punch press, 900-3201 (14), 12 ton.  
17220-Bertram's, 8/8 6' dia. x 12'  
clashed heads, half pipe coil jacket  
200 psi, 20/13 HP, unitized.



21210-Bertram's, 8/8 6' dia. x 12'  
clashed heads, half pipe coil jacket  
200 psi, 20/13 HP, unitized.

#### FILTER PRESSES

19846-Shiner PBF filter press, 12" x 12" alum. plates,  
closed delivery, 23 chambers.  
21692-Cohen Press mod. 260, 31 cu. ft., 1800 TAB.  
21882-Stokes rotary tablet, 15 station, 10 ton.  
2141-Bilene rotary tablet, 18 station, 10 ton.  
14425-Sheres Tab Pres mod. 551, 51 station, 4 ton.  
19417-Lohner ALP, plate & frame, 16 3/8" x 38", S/S re-  
cessed plates.  
50388-Kontakt Greaves, mod. 75MSM briquetting pres.  
20076-Sperry filter press, 36", cast iron plates, closed deliv.  
19462-Independent filter press, 42" x 42", polypropylene,  
4 eye closed, 34 chambers.  
20550-Sperry filter press, 42" End closer, 41 alum. plates.

#### FILTER PRESSES

19846-Shiner PBF filter press, 12" x 12" alum. plates,  
closed delivery, 23 chambers.

21692-Cohen Press mod. 260, 31 cu. ft., 1800 TAB.

21882-Stokes rotary tablet, 15 station, 10 ton.

2141-Bilene rotary tablet, 18 station, 10 ton.

14425-Sheres Tab Pres mod. 551, 51 station, 4 ton.

19417-Lohner ALP, plate & frame, 16 3/8" x 38", S/S re-  
cessed plates.

50388-Kontakt Greaves, mod. 75MSM briquetting pres.

20076-Sperry filter press, 36", cast iron plates, closed deliv.

19462-Independent filter press, 42" x 42", polypropylene,

4 eye closed, 34 chambers.

20550-Sperry filter press, 42" End closer, 41 alum. plates.

#### Special Sale

MUST MOVE STAINLESS TANKS

12,000 GAL., T304SS, 12'Dia.x

14' high, flat bottom, open top (16)

PRICE \$8000 ea. FOB PA #20655

#### TANKS-S/S

21283-Tank, S/S vert., 1200 gal., 8" dia x 6", flat top & bot.

20551-Tank, SS, 9000 gal., agit., 12" dia. x 14" h., flat bottom,

open top.

17043-Jet horz. tank, 304SS, 18,000 gal., 12" dia. x

22'9" long, 10 PSI.

#### DUST COLLECTORS

21126-Fabri-Ujet jkl, 500 gal. vent, 42 cu. ft.

16398-Micro dust collector, S/S, 63 sq. ft. mod. 9-8-100,

pulse jet.

21153-EVO, bin vent, 72 sq. ft., S/S, 5 HP

20253-Unused EVO pulse jet collector, mod. 84BP09C, 80

sq. ft.

#### REACTORS

21052-Unused Reactor, 600 gal., 304SS dimple jkt.

10138-Pfeudler, 800 gal., T-316L SS, 55 PSI int/150 PSI.

20928-Brighton, 4000 gal., 8" dia. x 10', 316 ELC S/S

20456-Reactor, 4,000 gal., 316SS/8" dia. x 7'9" ext. side.

21922-Sweco filter 60", mod. L800888, 2.5 HP.

21923-Keson filter 60", mod. K60158, 5.5 HP.

21884-Florentine Cyclone mod. FTTEC70-1, 304 S/S

12" dia. dish top. (3)

#### SCREENS

21203-Sprout Waldron filter, D10, 6 decks.

21150-Sprout Waldron, D10, 1 HP, 10 decks, 8/8 cont.

21187-Sprout Waldron, D10, 2 HP, 10 decks, 8/8 cont.

#### WE WANT TO BUY YOUR SURPLUS EQUIPMENT

AARON PAYS TOP DOLLAR

\$\$ CALL TODAY!!!

ATTENTION:  
EAST COAST BUYERS!

61,000 gal. Tanks, T304SS, 8"dia.x32'H, flat

top & bot. Chemineer Agit., mod 7HTD-20, 20

HP, 27 RPM. (4)

100,000 gal. Tanks, T304SS, 8"dia.x32'H, flat

top & bot. Chemineer Agit., mod 7HTD-20, 20

HP, 27 RPM. (4)

WE WANT TO BUY YOUR SURPLUS EQUIPMENT

AARON PAYS TOP DOLLAR

\$\$ CALL TODAY!!!

ATTENTION:  
EAST COAST BUYERS!

61,000 gal. Tanks, T304SS, 8"dia.x32'H, flat

top & bot. Chemineer Agit., mod 7HTD-20, 20

HP, 27 RPM. (4)

WE WANT TO BUY YOUR SURPLUS EQUIPMENT

AARON PAYS TOP DOLLAR

\$\$ CALL TODAY!!!

ATTENTION:  
EAST COAST BUYERS!

61,000 gal. Tanks, T304SS, 8"dia.x32'H, flat

top & bot. Chemineer Agit., mod 7HTD-20, 20

HP, 27 RPM. (4)

WE WANT TO BUY YOUR SURPLUS EQUIPMENT

AARON PAYS TOP DOLLAR

\$\$ CALL TODAY!!!

ATTENTION:  
EAST COAST BUYERS!

61,000 gal. Tanks, T304SS, 8"dia.x32'H, flat

top & bot. Chemineer Agit., mod 7HTD-20, 20

HP, 27 RPM. (4)

WE WANT TO BUY YOUR SURPLUS EQUIPMENT

AARON PAYS TOP DOLLAR

\$\$ CALL TODAY!!!

ATTENTION:  
EAST COAST BUYERS!

61,000 gal. Tanks, T304SS, 8"dia.x32'H, flat

top & bot. Chemineer Agit., mod 7HTD-20, 20

HP, 27 RPM. (4)

WE WANT TO BUY YOUR SURPLUS EQUIPMENT

AARON PAYS TOP DOLLAR

\$\$ CALL TODAY!!!

ATTENTION:  
EAST COAST BUYERS!

61,000 gal. Tanks, T304SS, 8"dia.x32'H, flat

top & bot. Chemineer Agit., mod 7HTD-20, 20

HP, 27 RPM. (4)

WE WANT TO BUY YOUR SURPLUS EQUIPMENT

AARON PAYS TOP DOLLAR

</div



**PERRY SAVES YOU TIME & MONEY**  
At The Right Place. The World's Largest Dealer of Process Equipment  
((609)) 267-1600



### KETTLES-REACTORS, SS

30,000 gal. 316SS fermenter, 14' x 24', 25 psi/vac., coils, 400 HP agit. (4)  
5,000 gal. 304SS kettle, 75 psi jkt., agit.  
4,100 gal. 304SS kettle, 16 psi jkt., 5 HP agit.  
3,600 gal. 316SS kettle, 20 psi jkt., 7½ HP agit. (2)  
2,800 gal. 304SS reactor, 20 psi/FV int., 180 psi jkt.  
1,800 gal. 304SS kettle, 80 psi jkt., 5 HP agit.  
1,500 gal. Pfaudler 316L/SS reactor, 15 psi jkt., 5 HP agit. (2)  
1,150 gal. 304SS reactor, 15 psi jkt., 25 psi jkt., 5 HP agit.  
900 gal. 304SS reactor, 75 psi/FV int., 150 psi jkt., agit.  
600 gal. 304SS reactor, 300 psi jkt., 75 psi jkt., coils (3)  
500 gal. 304SS reactor, 150 psi jkt., 5 HP agit.  
300 gal. 316SS reactor, 75 psi/FV int., 80 psi jkt.  
(50...) 316SS and 304SS reactors and kettles from 5 gallon to 400 gallon... call for Sat.

### BIG PF-AUDLET 316SS REACTORS

(3) 15,000 gal. Pfaudler, 316SS, 12'6" x 15', 100 psi, 200 psi jkt. Agit.  
(4) 10,000 gal. Pfaudler, 316SS, 11'6" x 12'4", 100 psi, 180 psi, jkt. Agit.

### REACTORS-GLASS

2 gal. Pfaudler, 750 psi/FV, 700 psi jkt.  
20 gal. Pfaudler, 25 psi, 100 psi jkt., agit. (2)  
30 gal. Pfaudler, jkted.  
50 gal. Pfaudler, 25 psi, 100 psi jkt., agit.  
50 gal. Pfaudler, 100 psi/vac., 85 psi jkt., agit., 1975  
100 gal. Pfaudler, 25 psi, 90 psi jkt., agit.  
150 gal. Pfaudler, 25 psi/vac., 90 psi jkt., agit.  
300 gal. Glassco, 25 psi/vac., 90 psi jkt., agit.  
500 gal. Pfaudler, 100 psi/vac., 90 psi jkt., vari-drive agit.  
750 gal. Pfaudler, 25 psi/vac., 105 psi jkt., 5 HP agit.  
1,000 gal. Pfaudler, 25 psi/vac., 90 psi jkt., 10 HP agit.  
1,600 gal. Pfaudler, 25 psi/vac., 90 psi jkt., 10 HP agit.  
1,500 gal. Pfaudler, 100 psi/vac., 90 psi jkt., 20 HP agit.  
2,000 gal. Pfaudler, 150 psi/vac., 90 psi jkt., 15 HP agit.  
2,500 gal. Pfaudler, 150 psi/vac., 90 psi jkt., 20 HP agit.

### NEW LIQUIDATION! CHEMICAL/POLYMER PLANT...ILLINOIS...BUY BEFORE REMOVAL AND SAVE!!

Bird 32" x 50", centrifuges, 316SS, contour (2)  
Welex 8" Extruder, 700 HP, 30:1 L/D (5)  
Welex 8" Extruder, 400 HP, 30:1 L/D (2)  
Conair 24" pelletizer, 40 HP (2)  
Renneberg 5' x 25' 304 SS rot. hot air dryers, 10 HP, (3)  
Swaco & Kason 60" screens, SS (2)  
K-Tron 7000 ft./hr. twin screw volumetric feeder, SS, (5)  
Pfaudler 1,500 gal. 316L SS reactor, FV/-180 psi 5 HP agit. (2)  
Pfaudler 10,000 gal. 316L SS reactor, 150 psi/FV int., 180 psi jkt., hyd agit (4)  
Worth. Plant air comp., 323 CFM @ 125 psi, 75 HP, Model #4-BB-2 (2)  
17,000 gal. & 12,000 gal. 316 SS Tanks (3)

PHONE (609) 267-1600

### DRYERS

Blow Knex 8'x2" 88 vac. dryer, 600 cu. ft.

Blow Knex 36" x 20' vac. dryer, 316L SS, 72 cu. ft.

Blow Knex 60" x 38" vac. dryer, nickel

Mabie 24" x 48" flaker, chrome plated

Sandvik 80" x 24" 85 belt flaker, UNUSED

Bergen 80" x 45" 85 conveyor dryer

Blow Knex 32" x 80" dbl. drum

Aeromatic 85" x 40" 88 vac. dryer, 5/10 HP

White 36" x 10' fluid bed, 88, aspir.-cooler

Renneberg 36" x 20' rotary dryer, 316 SS

96" x 60" Louisville 88 rotary dryer

10' x 100' GATX rot. steam tube dryers, 140 psi (4)

Wysanetz #VT-24 Turbo-tube dryer, 304SS

P-45 cu. ft. vac. dryer, 304SS

P-20 cu. ft. vac. dryer, 304 SS (2)

Abbe 30 cu. ft. 304SS vac. dryer

Devine 110 cu. ft. 304SS vac. dryer

Pfaudler 165 cu. ft. glass-steel vac. dryers (2)

Abbe 325 cu. ft. 316SS vac. dryer

Devine 554 cu. ft. vac. shelf dryer

Niro 55" SS spray dryer

Bowen 72" spray dryer, SS

Bowen 65" spray dryer, SS

Unused (3)

Bird 32" x 80" Decanter, Monel, contour (2)

Bird 32" x 80" Decanter, 304SS, back drive

Bird 12" x 30", 316SS, Decanter, 20 HP

Bird 16" x 28", 316SS, Decanter (3)

Bird 16" x 42", Decanter, steel, 10/30

Bird 24" x 38", Decanter, 304SS, contour-10

Bird 24" x 38", Decanter, 316SS, contour (3)

Bird 24" x 65" Decanter, 316L, 125 HP

Bird 24" x 86" Decanter, 304SS, carbide tiles, 1981, Unused (3)

Bird 32" x 80" Decanter, Monel, contour (2)

Bird 32" x 80" Decanter, 304SS, contour

DeLaval 316L/316 Decanter, 304SS, 20 HP (2)

Sharples P-5000 D-center, 316SS, 100 cu. ft.

P-45 cu. ft. vac. dryer, 316SS

P-20 cu. ft. vac. dryer, 304 SS (2)

Abbe 30 cu. ft. 304SS vac. dryer

Devine 110 cu. ft. 304SS vac. dryer

Pfaudler 165 cu. ft. glass-steel vac. dryers (2)

Abbe 325 cu. ft. 316SS vac. dryer

Devine 554 cu. ft. vac. shelf dryer

Niro 55" SS spray dryer

Bowen 72" spray dryer, SS

Bowen 65" spray dryer, SS

Unused (3)

Bird 32" x 80" Decanter, Monel, contour (2)

Bird 32" x 80" Decanter, 304SS, contour

DeLaval 316L/316 Decanter, 304SS, 20 HP (2)

Sharples P-5000 D-center, 316SS, 100 cu. ft.

P-45 cu. ft. vac. dryer, 316SS

P-20 cu. ft. vac. dryer, 304 SS (2)

Abbe 30 cu. ft. 304SS vac. dryer

Devine 110 cu. ft. 304SS vac. dryer

Pfaudler 165 cu. ft. glass-steel vac. dryers (2)

Abbe 325 cu. ft. 316SS vac. dryer

Devine 554 cu. ft. vac. shelf dryer

Niro 55" SS spray dryer

Bowen 72" spray dryer, SS

Bowen 65" spray dryer, SS

Unused (3)

Bird 32" x 80" Decanter, Monel, contour (2)

Bird 32" x 80" Decanter, 304SS, contour

DeLaval 316L/316 Decanter, 304SS, 20 HP (2)

Sharples P-5000 D-center, 316SS, 100 cu. ft.

P-45 cu. ft. vac. dryer, 316SS

P-20 cu. ft. vac. dryer, 304 SS (2)

Abbe 30 cu. ft. 304SS vac. dryer

Devine 110 cu. ft. 304SS vac. dryer

Pfaudler 165 cu. ft. glass-steel vac. dryers (2)

Abbe 325 cu. ft. 316SS vac. dryer

Devine 554 cu. ft. vac. shelf dryer

Niro 55" SS spray dryer

Bowen 72" spray dryer, SS

Bowen 65" spray dryer, SS

Unused (3)

Bird 32" x 80" Decanter, Monel, contour (2)

Bird 32" x 80" Decanter, 304SS, contour

DeLaval 316L/316 Decanter, 304SS, 20 HP (2)

Sharples P-5000 D-center, 316SS, 100 cu. ft.

P-45 cu. ft. vac. dryer, 316SS

P-20 cu. ft. vac. dryer, 304 SS (2)

Abbe 30 cu. ft. 304SS vac. dryer

Devine 110 cu. ft. 304SS vac. dryer

Pfaudler 165 cu. ft. glass-steel vac. dryers (2)

Abbe 325 cu. ft. 316SS vac. dryer

Devine 554 cu. ft. vac. shelf dryer

Niro 55" SS spray dryer

Bowen 72" spray dryer, SS

Bowen 65" spray dryer, SS

Unused (3)

Bird 32" x 80" Decanter, Monel, contour (2)

Bird 32" x 80" Decanter, 304SS, contour

DeLaval 316L/316 Decanter, 304SS, 20 HP (2)

Sharples P-5000 D-center, 316SS, 100 cu. ft.

P-45 cu. ft. vac. dryer, 316SS

P-20 cu. ft. vac. dryer, 304 SS (2)

Abbe 30 cu. ft. 304SS vac. dryer

Devine 110 cu. ft. 304SS vac. dryer

Pfaudler 165 cu. ft. glass-steel vac. dryers (2)

Abbe 325 cu. ft. 316SS vac. dryer

Devine 554 cu. ft. vac. shelf dryer

Niro 55" SS spray dryer

Bowen 72" spray dryer, SS

Bowen 65" spray dryer, SS

Unused (3)

Bird 32" x 80" Decanter, Monel, contour (2)

Bird 32" x 80" Decanter, 304SS, contour

DeLaval 316L/316 Decanter, 304SS, 20 HP (2)

Sharples P-5000 D-center, 316SS, 100 cu. ft.

P-45 cu. ft. vac. dryer, 316SS

P-20 cu. ft. vac. dryer, 304 SS (2)

Abbe 30 cu. ft. 304SS vac. dryer

Devine 110 cu. ft. 304SS vac. dryer

Pfaudler 165 cu. ft. glass-steel vac. dryers (2)



# CHEMICAL PROFILE ETHANOLAMINES

November 10, 1986

## SUPPLY

PRODUCER	CAPACITY*
Dow, Plaquemine, La.	150
ICL, Bayport, Tex.	40
Texaco, Port Neches, Tex.	240
Union Carbide, Seadrift, Tex.	250
Total.	680

\*Millions of pounds per year of mono-, di-, and triethanolamines. Production is split almost evenly among the three. Dow's Midland, Mich. plant, rated at 25-million pounds per year, currently produces isopropanolamines. Olin placed its 40-million pound Brandenburg, Ky. facility on stand-by last July, but continues to market material. Profile last published 11/21/83; this revision 11/10/86.

## DEMAND

1985: 540 million pounds; 1986: 525 million pounds; 1990: 580 million pounds (includes exports).

## GROWTH

Historical (1976-1985): 7.1 percent per year; future: 2.5 percent per year through 1990.

## PRICE

Historical (1952-1986): High, 52½c. per pound (MEA); 53½c. per pound (DEA) 54½c. per pound (TEA-85 percent), tanks, frt. alld.; low, 13c. per pound (MEA); 12½c. per pound (DEA); 16c. per pound (TEA-85 percent), same basis. Current: 33c. per pound (MEA); 34c. per pound (DEA); 35c. per pound (TEA-85 percent), same basis.

## USES

Domestic, 65 percent (detergents, including textiles, personal care products, and other surfactants, 35 percent; natural gas conditioning and petroleum use, 30 percent; metal working, 12 percent; textiles, 12 percent; other, including agricultural intermediate and cement grinding aids, 11 percent); exports, 35 percent.

## STRENGTH

Exports have been posting large, steady growth for the past several years. This year's surge from 170 million pounds to a projected 183 million pounds can be partly attributed to the weaker dollar, and increased demand from Europe. Domestic surfactant applications, particularly in liquid laundry detergents, and personal care products are performing well.

## WEAKNESS

The depressed oil and gas industry has caused a very large cutback in ethanolamine sales for treating sour gas. Not only is volume down, but gas producers are concentrating production on more economical sweet gas, thereby doubly reducing ethanolamine demand. Prices, dragged down by tumbling ethylene values, have fallen 4c. per pound since January 1, 1986. The metal-working business has been hurt by widespread industry rationalizations, and textiles have been battered by imports.

## OUTLOOK

The surfactants business is projected to grow well above the GNP through the decade, but there's no telling when the natural gas business will rebound. Olin's idling of its Brandenburg plant has improved the domestic supply-demand balance, and Carbide has been, and will continue, to increase its internal demand for monoethanolamines for the production of ethyleneamines.

# BOOKSHELF III

## When Markets Shake

This book\* explores a problem facing today's top managers — how to manage effectively when traditional ground rules crumble and fall. The author, a Harvard Business School professor who for more than twenty years has researched managerial responses to changing strategic and economic forces, takes the petrochemical industry as his model and deals with that industry worldwide.

Concentrating on the relationship of major corporations with their governments, the book correlates management responses to the changing economic climate and the effect of national policy and regulations on its decisions.

The volume begins with an overview of the petrochemical industry of the 1980s as it plunged into an economic crevasse of excess capacity and severe losses (with no expected decline in competition). Common developments and patterns are drawn from six international countries, highlighting similarities which transcend national boundaries.

Utilizing these elements, managerial strategies are extracted which it is felt have been used successfully in dealing not only with a changing marketplace, but also with the restrictions of the political environment.

Following this overview, the author puts his findings into a three-phase restructuring agenda for top management. It includes: preparation — the need for a cogent strategy plan for both short- and long-term changes; concentration — optimizing a company's opportunities through mergers, swaps, takeovers and acquisitions; and rationalization — the often painful process of modifying existing structures in order to carry out the agenda.

To aid managers in their planning, he also stresses the need for reforms in public policy toward industry, particularly in regard to cooperative actions.

The petrochemical industry is not a unique case, but foreshadows what could be true for many global industries. If managers can learn from their petrochemical counterparts, they can prepare themselves for that time when their own markets quake.

\*WHEN MARKETS QUAKE. By Joseph L. Bower. Cloth, 6 1/2 X 9 1/2 inches. 256 pages. Harvard Business School Press, Harvard Business School, Boston, Mass. \$21.95.

## Hazardous Waste

This guide\* to the Resource Conservation & Recovery Act emphasizes both current and the future impact of the 1984 amendments to the act, which greatly expand and strengthen the national regulatory program.

The book covers the full scope of RCRA, describing and analyzing the control of hazardous waste generation, management, treatment, storage, transportation and port.

The authors present information on a wide variety of regulatory issues, providing answers to a number of important questions. What is hazardous waste, and which wastes are hazardous? How will the regulations affect small-quantity generators, a group previously exempt from controls? Which wastes are restricted from land disposal? Who is involved in the permitting process for generators, transporters, treatment, storage and disposal facilities? What are the requirements for environmental monitoring and cleanup?

The book examines a wide range of topics from the history of the program to requirements for leaking underground storage tanks, from understanding the nature and distinctions between waste management, waste recycling and production activities to the relationship between state and Federal RCRA programs.

Full discussions are devoted to such topics as qualifying for interim status subject to the new requirements; public participation in the permitting process; RCRA regulations for insurance, financial responsibility, and contingency plans; and the waste subject to RCRA in the near future.

\*HAZARDOUS WASTE REGULATION — THE NEW ERA: AN ANALYSIS AND GUIDE TO THE 1984 AMENDMENTS. By Richard C. Fortuna and David J. Lennett. Cloth, 6 X 9 inches. McGraw-Hill Book Company, 1221 Avenue of the Americas, New York, N.Y. 10020. \$59.50.

# MEETINGS CALENDAR



November 10, 1986

## THIS WEEK

AMERICAN PETROLEUM INSTITUTE, annual meeting, Houston, Tex. Hyatt Regency, November 9-11.

DRUG COLOR MANUFACTURERS ASSOCIATION, technical seminar, requirements under the Toxic Substances Control Act. Hilton Gateway Hotel, Gateway Center Newark, N.J., November 12.

FRAGRANCE MATERIALS ASSOCIATION OF THE UNITED STATES, 10th international congress of essential oils, fragrances and flavors. Omni Shoreham Hotel, headquarters hotel, Washington, D.C., November 16-20.

K-88, 10th international trade fair for plastics and rubber. Dusseldorf, West Germany, November 6-13.

## THIS MONTH

FERTILIZER ROUND TABLE, Sheraton Inner Harbor Hotel, Baltimore, Md., November 17-19.

54 CHEMICAL MARKETING REPORTER November 10, 1986

CHEMICAL MANUFACTURERS ASSOCIATION, chemical industry conference, Palmer House Hotel, November 17-18, Chicago, Ill.

DRUG, CHEMICAL & ALLIED TRADES ASSOCIATION, fall luncheon, Waldorf-Astoria Hotel, New York, November 18.

EUROPEAN PETROCHEMICAL ASSOCIATION, international transport seminar, Frankfurt Sheraton Hotel, Frankfurt, West Germany, November 20-21.

LATIN AMERICAN PETROCHEMICAL ASSOCIATION, sixth annual meeting, Rio Palace Hotel, Rio de Janeiro, Brazil, November 23-25.

AMERICAN INSTITUTE OF CHEMICAL ENGINEERS, center for chemical process safety, international conference on chemical safety issues. Omni Shoreham Hotel, Washington, D.C., February 3-5.

CHEMICAL MARKETING RESEARCH ASSOCIATION, Houston Meeting: "The US Chemical Industry Responding to Change," Worth Galleria Hotel, Houston, Tex., February 4-5, 1987.

CHLORINE INSTITUTE, winter meeting, Mayflower Hotel, Washington, D.C., March 15-19.

## DECEMBER

CHEMICAL SPECIALTIES MANUFACTURERS ASSOCIATION, 73rd annual meeting, Marriott's Harbor Beach Resort, Fort Lauderdale, Fla., December 7-11.

# JOB & PEOPLE

## Air Products Names Manager and Director

Air Products & Chemicals, Inc., has appointed Edward M. Hare manager of market research in its Chemical Group and Dr. John B. Pfeiffer director of research and development in the technical diversification department.

Mr. Hare will have responsibility for directing market studies and business analyses and will take a principal role in the chemicals group's diversification efforts.

Dr. Pfeiffer assumes responsibility for all research and development efforts within the technical diversification department. He has been with Air Products since 1976.

Michael R. Schimenti, who has been named president of Griffin International Corporation. He was vice-president of the solvents and agrochemical division of Exxon Chemical Americas in Houston.

MARY LU HICKEY has been named regional sales manager in the Coatings and Adhesives Division for Hercules, Inc.'s Midwestern region. JANET E. MANN has been elected general manager of the chematec chemicals management unit at Akzo Chemie America. DONALD E. MCKINNEY has joined Specialty Industrial Products Inc. as director of operations.

GREGORY RAMSEY has been appointed president of Strategic Analysis, Inc... JOSEPH DONOVAN has been named regional sales manager for hydrogen peroxide and the general chemical line in the Chemicals Division of Degussa Corporation... DAVID W. MARTYN has been appointed manager of process development in the re-

search and development department at Horizon Chemical, a division of A.E. Staley Mfg. Co.

ROBERT T. SMITH has been named direc-

tor of marketing for FMC Corporation's Phosphorous Chemicals Division... A. RICHARD KOETZEL has been appointed vice-president of sales and marketing at Chemical Resources, Ltd... DR. HAGEN B. SCHULTE has been elected president of Baymag Plant, Alberta, Canada.

CRAIG A. ROSENOW has been named manager of engineering in Unocal Corporation's petrochemical group, KENNETH S. WILDER has been named plant manager for the petrochemical group's Conshohocken, Pa. distribution center, DARYI. W. DIERECIPIITER has been named supervisor of

environmental affairs for the petrochemical group and SERGIO O. LEONE has been appointed senior plant manager of the group's Carteret, N.J., distribution center.

R.N. WALLACE has been named district manager of the Rocky Mountain area at Betz Laboratories... BRIAN C. LIM has been appointed manager of environmental services for H.B. Fuller Company of St. Paul, Minn... D. J. BOLGER has been named vice-president of planning and supply for Mobil Chemical Company.

Monsanto Agricultural Company has ap-

pointed ROBERT L. HARNESS vice-presi-

dent for environmental and public affairs,

ROBERT W. REYNOLDS vice-president for

North America and HENDRIK A. VER-

COOMBE vice-president for commercial de-

velopment.

TERRENCE R. WEAVER has been ap-

pointed business manager of light oils for

Amoco Oil Company... RICHARD L. MC-

NEEL has been appointed vice-president of

business ventures in the Far East for Amoco

Chemical Company... WALTER L. KREBS

has been elected senior vice-president and

treasurer of the DuBois Company, the corpo-

rate headquarters for Chemed Corporation's

DuBois and Fabrilife businesses.

LEONARD M. LEWANDOWSKI has been ap-

pointed product manager of amino acids

and new products for the Chemicals Division

of Degussa Corporation and JOHN

LEWISON has been appointed manager of

regulatory affairs for Degussa.

## BUSINESS BRIEFS

## BUSINESS BRIEFS

ELIZ PAPERCHEM INC., Jacksonville, Fla., has introduced a specially formulated

corrosion inhibitor designed to re-

duce corrosion and deposition on bronze

rolls and bronze suction press rolls.

The product contains an inhibitor that pro-

tects metals in industrial pulp, paper and pa-

per applications. It was previously

available from Rohm and Haas Company.

GINEC INC., Waltham, Mass., says it has

developed a new line of electrodes for a vari-

ety of electrochemical applications, includ-

ing fuel cells, oxygen generators, electro-organic

synthesis, gas sensors and alkaline

metal-air batteries. The electrodes feature a

choice of support materials that benefit the

user by being lightweight and flexible, Ginec says.

NATIONAL STARCH & CHEMICAL Corpo-

ration has added "Dur-O-SET" CS35, a high-

viscosity polyvinyl acetate emulsion, to the

line of continuous process polymers manu-

factured by its Resins & Specialty Chemicals

Division. The products are designed for adhe-

sive manufacturing.

WITCO CORPORATION has introduced a

new water-based flame retardant designed

to minimize the chance of corrosion on prod-

uct equipment during usage. The

"Fyrestor" flame retardant is the latest ad-

ditive to Witco's line of "Pearsall" flame

retardants used in latex systems for fabric

and non-woven applications.

November 10, 1986

CHEMICAL MARKETING REPORTER

65